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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/474,146	06/07/95	HARVEY J	5634.186

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EXAMINER	
LUTHER,W	
ART UNIT	**PAPER NUMBER**
2731	

DATE MAILED: 04/06/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
08/474,146	Harvey et al.
Examiner	**Group Art Unit**
WILLIAM LUTHER	2731

☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *(see attached Office Action for status of the pending claims)* is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☐ Claim(s) _____ is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

1. This action is in response to 3/31/99. Remarks that exist for pending claims 3-138, have been considered but are moot in view of the new ground(s) of rejection.

Overview.

As a preliminary matter, it is understood that applicants and the PTO have agreed to consolidate co-pending applications from ~329 in number to ~78 in number wherein applicants "claim" priority benefit under Section 120 for ~41/78 to 9/11/87 ('87), and ~37/78 to 11/3/81 ('81). However, to date, applicants have failed to complete the consolidation. For example and for illustration, in the group of 37/78, examiner finds consolidation papers for **only** 23 of 37.[1] Applicants must understand that their failure, to date, to complete the consolation has contributed to delay in prosecution, noting that the agreement to consolidate was made over an **entire year ago**.[2] Clarification is requested for when applicants intend to carry forth completion of their

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[1]See Appendix **B** for examiners count of cases having consolidation papers. It is noted, for ex, that "group" 8 fails to map the claims, and hence is not within consonance of agreement and therefore is recognized as an amendment to an outstanding office action.

[2]For illustration, it is noted that the co-pending application no. 08/474,964 (see "group" 30 in Appendix **B)** consolidation was received ***3/9/99.*** Therein, on page 9 (paper 20), applicants allege "In consonance with the agreement...Applicants...join the claims", etc.

agreement. In any event, Office actions have been mailed on 2 consolidated groups[3], and the remaining now follow.

Section 112.

Written description.

In the Summer/Fall '97, responses to the ~37/78 co-pending applications' first actions' on the merits, applicants claim priority benefit, under Section 120, to 11/3/81. However, when responding to Section 112 written description rejections, applicants refer to the ***parent*** patent 4,694,490, ('490) disclosure as "the specification". However, it appears they have mistaken the patent '490 specification for the instant specification. The reason the instant specification is not the '490 specification is because applicants failed to incorporate-by-reference the '490 ('81) specification into the later '87 specification first disclosed on 11/9/87. Because, *inter alia*, it appears applicants have:

- generally ignored the instant specification; and

- apparently drafted the pending claims with respect to "***only***" the '81 disclosure; and

- generally responded to Section 112 written description rejections by citing sentences passages, and paragraphs, that ***do not exist*** in the instant disclosure;

pending claims are rejected as failing Section 112's written description requirement.

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[3]Groups 27 and 33 in Appendix **B**, or co-pending applications 08/470,571, and 08/487,526, respectively.

Because applicants have apparently mistaken the parent '490 disclosure for the instant disclosure, all pending claims are rejected under Section 112's written description requirement. Each claim has been raised into doubt by the manner in which applicants have responded to previous Section 112 rejections. Hence, examiner respectfully requests applicants to:

- identify any disclosure ***common*** to both the parent '490 and the instant disclosure, and then demonstrate full support under Section 112, by ***only*** the common subject matter. Examiner respectfully requests that applicants be ***very careful not to*** identify subject matter that was omitted when making the 9/11/87, disclosure; and be ***very careful not to*** identify subject matter that was added when making the 9/11/87, disclosure. The consequence, of course, would be failure to demonstrate Section 112's written description requirement.

Moreover, because, *inter alia*, applicants have apparently mistaken the parent '490 disclosure for the instant disclosure, Section 112 written description doubt has been raised by applicants. As a consequence, ***examiner respectively requests applicants demonstration support for at least every pending claim*** in the manner described above. However, it is suggested applicants demonstrate support for ***each*** phrase enumerated in the Section 112 written description rejection below.

Enablement:

Moreover, terms and their derivatives such as 'digital' and 'data', *inter alia*, are considered to require undue experimentation in view of the ***instant*** disclosure. Therefore, pending claims reciting the terms and derivatives of the terms are rejected under Section 112's enablement requirement.

Best Mode:

Notwithstanding, for the reasons, *inter alia*, explained below in the corresponding rejection below, pending claims are rejected under Section 112's best mode requirement.

Second Paragraph.

Further, because applicants have apparently mistaken the parent '490 disclosure for the instant disclosure, pending claims are rejected under Section 112's second paragraph for reasons, *inter alia*, including: failure to claim the invention; failure to recite terms whose meets and bounds can be determined ***from a reading of the instant disclosure***. This rejection may be withdrawn when applicants ***accurately*** explain the specific meaning of every pending claim term when there are different descriptions for such terms from '81 and '87 including, *inter alia*: programming; data; information; instruction; signal; and every other term having a difference in respective '81 and '87 descriptions.

Double Patenting.

Pending claims are rejected under the doctrine of judge made double patenting as they would extend obvious variations of already enjoyed monopolies. Pending claims are not distinct and independent from patents: 5,335,277 ('277); 5,233,654 ('654); 5,109,414 ('414); 4,965,825 ('825); 4,704,725 ('725); 4,694,490 ('490).

See Appendix **A**.

Notwithstanding, applicants have recognized his patents have been involved in litigation. Examiner believes it is ***critical*** that applicants provide claim constructions for his patents from those litigations, for obvious type double patenting examination, as they are understood to be directly relevant to the instant rejections.

The Administrative requirement is maintained.

Sections 102 and 103.

For the benefit of compact prosecution, examiner addresses the pending claims as thoroughly as possible with other prior art in rejection, even though applicants have apparently mistaken the parent '490 disclosure for the instant disclosure.

However, because the '490 parent disclosure is very brief, for ex, approximately 11,800

words, examiner addresses the pending claims to the ***limited*** extent they are ***conceptually*** recognized by examiner, in *embodiments previously identified by applicants* when mistaking the parent '490 disclosure for the instant disclosure in response to, *inter alia*, previous Section 112 written description rejections. That is to say that pending claims are ***grouped conceptually*** and are addressed by application of prior art according to their conceptual grouping.

Although applicants, in fact, omitted most sentences, paragraphs, and figures, of the parent '490 disclosure when making the later 9/11/87 (co-pending parent 08/113,329)('329), disclosure, (i.e. corresponding to the instant disclosure) they allege to have incorporated-by-reference the documents, paper 21 of '329, *inter alia*, ***into page 1*** of the 9/11/87, disclosure when making the instant disclosure on ~6/95 (see respective preliminary amendments accompanying Section 120 filings of co-pending applications). Section 120, however, does not permit the apparent hiatus of subject matter, from 9/11/87, to '95, i.e., the instant filing date, for the priority benefit under Section 120 to the 11/3/81, disclosure. Hence the added subject matter is not impermissible new matter. However, it is anticipated by the '490 and '725 patents when it gets the '95 effective filing date.

Oath or Declaration.

The instant disclosure appears, *in fact*, to be a continuation-in-part, because, by applicants' own indication, the intention of the preliminary amendment's' 'incorporation-by-

reference' statement, was for incorporating all documents of the '329 parent ***into*** page 1 of the instant disclosure (applicants should refer to the related remarks, ***they have provided,*** on the record).

Objection to the Specification.

The instant specification is objected to because applicants are changing the instant disclosure, some +18 years after making the '81 disclosure and some +12 years after making the '87 disclosure.

I.D.S.

Examiner specifically requests applicants identify the most relevant art, in the information disclosure statements, to the pending claims. Examiner believes identification of such art is critical to determining patentability.

Claim Rejections - 35 U.S.C. § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 3-138, are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Considering claim 3, no support is found for:

-a method of processing signals;
-to control;
-a presentation;
-said method comprising the steps of:
-receiving;
-a television signal;
-containing television programming;
-and;
-communicating;
-said television signal;
-to;
-a storage device;
-receiving;
-a first instruct signal;
-which is effective;
-to instruct;
-a computer at;
-a user station;
-to supplement;
-or;
-complete;
-said television programming at;
-an output device;
-selecting;
-one of;
-(1) a time at which;
-to communicate;
-said first instruct signal;
-and;
-(2) a location;

-to which;
-to communicate;
-said first instruct signal;
-communicating;
-said first instruct signal at;
-said selected time or;
-to;
-said selected location;
-and;
-storing;
-said television signal;
-and;
-said instruct signal at;
-said storage device.

Considering claim 4, no support is found for:
-The method of claim 3;
-further comprising;
-one of;
-the steps of:
-embedding;
-said first instruct signal in;
-said television signal;
-embedding;
-a code;
-or;
-datum in;
-said television programming that enables;
-said computer;
-to locate some processor;
-code;
-or;
-control;
-a presentation of;
-said television programming in accordance with;
-said first instruct signal;
-communicating;
-a program unit identification code;
-to;

-said storage device;
-and;
-storing;
-said program unit identification code at;
-a storage location associated with;
-said television programming;
-communicating;
-to;
-and;
-storing at;
-said storage device some information;
-to evidence;
-an availability;
-use;
-or;
-usage of;
-said television programming;
-said first instruct signal;
-or;
-some processor;
-code at;
-a user station;
-storing at;
-said storage device;
-a second instruct signal;
-which is effective;
-at;
-a user station;
-to process data;
-to generate some output;
-to form the basis for;
-the supplementation;
-or;
-completion of;
-said television programming;
-storing at;
-said storage device;
-a second instruct signal;
-which is effective;

-at;
-said user station;
-to display;
-a combined;
-or;
-sequential presentation of;
-said television programming;
-and;
-a user specific data;
-storing at;
-said storage device;
-a second instruct signal;
-which is effective;
-at;
-said user station;
-to process;
-a user reaction;
-to;
-said television programming;
-storing at;
-said storage device;
-a second instruct signal;
-which is effective;
-at;
-a;
-said user station;
-to communicate;
-to;
-a remote station;
-a query for;
-information;
-to be associated with;
-said television programming or;
-to enable display of;
-said television programming;
-storing at;
-said storage device;
-a second instruct signal;
-which is effective;

-to control;
-said user station;
-to receive information;
-to be used in the supplementation;
-or;
-completion of;
-said television programming;
-storing at;
-said storage device;
-a second instruct signal;
-which is effective;
-at;
-a user station;
-to process;
-a digital television signal;
-and;
-storing at;
-said storage device;
-a code;
-or;
-datum;
-to serve as;
-a basis for;
-enabling;
-an output device;
-to display at least some of;
-said television programming;
-or;
-said computer;
-to process some processor;
-code.

Considering claim 5, no support is found for:
-The method of claim 3;
-wherein;
-said selected location is in;
-said television signal;
-said method;
-further comprising the step of;

-storing some information at;
-said storage device that evidences one;
-or;
-more of:
-(1) a title of;
-a television program;
-(2) a proper use of programming;
-(3) a transmission station;
-(4) a receiver station;
-(5) a network;
-(6) a broadcast station;
-(7) a channel on;
-a cable system;
-(8) a time of transmission;
-(9) a identification of;
-an instruct signal;
-(10) a source;
-or;
-supplier of data;
-(11) a distributor;
-or;
-an advertisement;
-and;
-(12) an indication of copyright.

Considering claim 6, no support is found for:
-The method of claim 3;
-wherein;
-said first instruct signal is embedded in;
-said television signal;
-said method;
-further comprising the steps of:
-selecting;
-a second one from the group consisting of:
-(1) a datum that identifies;
-a unit of computer software in;
-said television signal;
-(2) a datum that specifies some of;
-a way;

-to instruct receiver end equipment what specific programming;
-to select;
-to play;
-or;
-record ;
-other than ;
-that immediately at ;
-and;
-how;
-to load;
-said specific programming on player;
-or;
-recorder equipment;
-when;
-and;
-how;
-to play;
-or;
-record;
-said specific programming ;
-other than;
- immediately;
-how;
-to modify;
-said specific programming;
-what equipment;
-or;
-channel;
-or;
-channels;
-to transmit;
-said specific programming on;
-when;
-to transmit;
-said specific programming;
-and;
-how;
-and;
-where;

-to file;
-or;
-refile;
-or;
-dispose of;
-said specific programming;
-(3) a datum that;
-an addressed apparatus;
-(4) a datum that specifies where;
-when;
-or;
-how;
-to locate;
-a signal;
-(5) a datum that informs;
-a processor;
-of;
-a fashion for;
-identifying;
-and;
-processing;
-a signal;
-(6) a datum that is part of;
-a decryption code-;
-(7) a comparison datum that;
-a communication schedule;
-and;
-embedding the selected second one in;
-said television signal.

Considering claim 7, no support is found for:
-The method of claim 3;
-wherein;
-said first instruct signal comprises processor;
-code;
-said method;
-further comprising the steps of:
-selecting;
-a second instruct signal;

-said second instruct signal;
-being;
-one from the group consisting of:
-(1) a switch control signal;
-(2) a timing control signal;
-(3) a locating control signal;
-(4) an instruct-to-contact signal that;
-a remote receiver station;
-(5) an instruct-to-transfer signal that;
-a unit of broadcast;
-or;
-cablecast programming;
-(6) an instruct-to-delay signal that;
-a unit of broadcast;
-or;
-cablecast programming;
-(7) an instruct-to-decrypt;
-or;
-instruct-to-interrupt signal that;
-a unit of programming;
-and;
-a way;
-to decrypt;
-or;
-interrupt;
-(8) an instruct-to-enable;
-or;
-instruct-to-disable signal that;
-an apparatus;
-(9) an instruct-to-record signal that;
-a broadcast;
-or;
-cablecast program;
-(10) an instruction signal that controls;
-a multimedia;
-presentation;
-an instruction signal that governs;
-a broadcast;
-or;

-cablecast receiver station environment;
-(12) an instruct-to-power-on signal that;
-a receiver;
-(13) an instruct-to-tune signal that;
-a receiver;
-or;
-a frequency;
-(14) an instruct-to-coordinate signal that;
-two apparatus;
-(15) an instruct-to-compare signal that;
-a news transmission;
-or;
-a computer input;
-(16) an identifier signal that causes;
-a computer;
-to instruct;
-a plurality of tuners each;
-to tune;
-to;
-a broadcast;
-or;
-cablecast transmission;
-(17) an instruct-to-coordinate signal that;
-two units of multimedia;
-information;
-and;
-one of;
-(1) an output time;
-and;
-(2) an output place;
-(18) an instruct-to-generate signal that;
-an output datum;
-(19) an instruct-to-transmit signal that;
-a computer output;
-(20) an instruct-to-overlay signal that;
-a television image;
-(21) an instruct signal that;
-a function;
-to perform if;

-a predetermined condition exists;
-(22) an instruct-to-enable-;
-and;
-deliver signal that;
-information that supplements;
-a television program;
-(23) an instruct-to-transmit signal that;
-a computer peripheral storage device;
-(24) a code signal that;
-a datum;
-to remove;
-or;
-embed;
-and;
-(25) a signal addressed;
-to;
-a receiver station apparatus;
-and;
-embedding;
-said selected second instruct signal in;
-said television signal.

Considering claim 8, no support is found for:
-a method of generating;
-and;
-encoding signals;
-to control;
-a presentation comprising the steps of:
-receiving;
-and;
-storing;
-a program that contains video information;
-receiving;
-an instruction;
-said instruction having effect;
-to instruct;
-a user station processor;
-to generate;
-or;

-output information;
-to supplement;
-or;
-complete;
-said program;
-encoding;
-said instruction;
-said step of encoding translating;
-said instruction;
-to;
-a first control signal with;
-said effect;
-and;
-storing;
-said first control signal in conjunction with;
-said program.

Considering claim 9, no support is found for:
-The method of claim 8;
-wherein supplemental program material is stored at the same location as;
-said processor;
-and;
-said first control signal directs;
-said processor;
-to generate;
-a video overlay based on;
-said supplemental material that is coordinated with;
-said video information in;
-said program;
-said method;
-further comprising the steps of:
-storing;
-a second control signal in conjunction with;
-said program;
-and;
-said first control signal from;
-said step of encoding;
-said second control signal having effect at;
-a user station;

-to query;
-a remote station for;
-said supplemental programming or;
-to receive;
-said supplemental program material in;
-a broadcast;
-or;
-cablecast transmission.

Considering claim 10, no support is found for:
-The method of claim 8;
-wherein;
-said first control signal directs;
-said processor;
-to generate;
-a video overlay that is coordinated with;
-said video information in;
-said program;
-said method further including;
-one step from the group consisting of:
-transmitting;
-a combined video signal based on;
-said program;
-and;
-said video overlay generated by;
-said processor;
-over;
-a broadcast;
-or;
-cablecast network;
-to;
-a plurality of receiver stations;
-and;
-transmitting;
-a combined video signal from;
-said program;
-and;
-said video overlay generated by;
-said processor;

-to;
-a co-located video display.

Considering claim 11, no support is found for:
-The method of claim 8;
-further comprising the steps of:
-receiving;
-a second instruction;
-said second instruction;
-being;
-one of;
-the group consisting of:
-(1) an instruction;
-which is effective;
-at;
-a user station;
-to generate some output;
-to be associated with;
-a product;
-service;
-or;
-information presentation;
-(2) an instruction;
-which is effective;
-at;
-a user station;
-to display;
-a combined;
-or;
-sequential presentation of;
-a mass medium program;
-and;
-user specific data;
-(3) an instruction;
-which is effective;
-at;
-a user station;
-to process;
-a user reaction;

-to;
-said program;
-(4) an instruction;
-which is effective;
-at;
-a user station;
-to communicate;
-to;
-a remote station;
-a query for;
-information;
-to be associated with;
-said program or;
-to enable display of;
-said program;
-(5) an instruction;
-which is effective;
-at;
-a user station;
-to receive information;
-to form the basis of the supplementing;
-or;
-completion of;
-said program;
-(6) an instruction;
-which is effective;
-at;
-a user station;
-to process;
-a digital television signal;
-and;
-(7) an instruction;
-which is effective;
-at;
-a user station;
-to serve as;
-a basis for;
-enabling;
-an output device;

-to display at least some of;
-said program;
-or;
-for;
-enabling;
-said processor;
-to process some processor;
-code;
-encoding;
-said second instruction;
-said second step of encoding translating;
-said second instruction;
-to;
-a second control signal;
-said second control signal for;
-directing;
-said processor;
-to perform the specified effect indicated by;
-said second instruction;
-and;
-storing;
-said second control signal in conjunction with;
-said program.

Considering claim 12, no support is found for:
-The method of claim 8, further including ;
-one step ;
-from the group;
- consisting of: ;
-embedding;
-said first control signal;
- in the non-visible portion of;
-a television signal;
-embedding;
-a code in;
-said program that enables;
-a computer;
-or;
-controller;

-to control;
-a presentation of;
-said program in accordance with;
-said first control signal;
-communicating;
-a program unit identification code;
-and;
-storing;
-said program unit identification code at;
-a storage location associated with;
-said program;
-and;
-communicating;
-to;
-and;
-storing at;
-a storage location associated with;
-said program some information;
-to evidence;
-an availability;
-use;
-or;
-usage of;
-said program at;
-a user station.

Considering claim 13, no support is found for:
-a method of processing signals in;
-a system of stations including;
-at least;
-one;
-transmitter station;
-and;
-at least;
-one;
-receiver station;
-to control;
-a mass medium programming presentation comprising the steps of:
-receiving;

-a signal;
-containing;
-a data;
-file;
-or;
-unit of mass medium programming;
-and;
-communicating;
-said signal;
-to;
-a storage device;
-receiving one;
-or;
-more instruct signals which;
-are effective at;
-a broadcast;
-or;
-cablecast transmitter station;
-to communicate;
-said signal;
-to;
-a transmitter;
-and;
-at;
-a receiver station;
-to store;
-said signal;
-or;
-present information contained in;
-said signal at;
-an output device;
-communicating;
-said one;
-or;
-more instruct signals;
-to;
-said storage device;
-and;
-storing;

-said one;
-or;
-more instruct signals at;
-said storage device in association with;
-said data;
-file;
-or;
-unit of mass medium programming.

Considering claim 14, no support is found for:
-The method of claim 13;
-wherein;
-said data;
-file;
-or;
-unit of mass medium programming comprises;
-video;
-audio;
-or;
-text;
-said method;
-further comprising one from the group consisting of: embedding;
-said one;
-or;
-more instruct signals in;
-a television;
-or;
-radio signal;
-embedding;
-a code in;
-said data;
-file;
-or;
-unit of mass medium programming that enables;
-a processor;
-or;
-computer at;
-a user station;
-to receive;

-or;
-output information;
-to supplement;
-or;
-complete;
-said data;
-file;
-or;
-unit of mass medium programming in accordance with;
-said one;
-or;
-more instruct signals;
-communicating;
-a program unit identification code;
-to;
-said storage device;
-and;
-storing;
-said program unit identification code at;
-a storage location in;
-said storage device associated with;
-said data;
-file;
-or;
-unit of mass medium programming;
-communicating;
-to;
-and;
-storing at;
-said storage device some information;
-to be processed at;
-a user station;
-to evidence;
-an availability;
-use;
-or;
-usage of video;
-audio;
-or;

-text associated with;
-said data;
-file;
-or;
-unit of mass medium programming;
-communicating;
-to;
-and;
-storing at;
-said storage device one;
-or;
-more second instruct signals which;
-are effective at;
-a user station;
-to generate some output;
-to supplement;
-or;
-complete;
-said data;
-file;
-or;
-unit of mass medium programming;
-communicating;
-to;
-and;
-storing at;
-said storage device one;
-or;
-more second instruct signals which;
-are effective;
-to generate some output;
-to be associated with;
-said;
-service;
-or;
-information presentation;
-communicating;
-to;
-and;

-storing at;
-said storage device one;
-or;
-more second instruct signals which;
-are effective at;
-a receiver station;
-to display;
-a combined;
-or;
-sequential presentation of;
-a mass medium program;
-and;
-user specific data;
-communicating;
-to;
-and;
-storing at;
-said storage device one;
-or;
-more second instruct signals which;
-are effective;
-to process;
-a user reaction;
-to;
-said data;
-file;
-or;
-unit of mass medium programming;
-communicating;
-to;
-and;
-storing at;
-said storage device one;
-or;
-more second instruct signals which;
-are effective;
-to communicate;
-to;
-a remote station;

-a query for;
-information;
-to be associated with;
-said data;
-file;
-or;
-unit of mass medium programming or;
-to enable display of;
-said data;
-file;
-or;
-unit of mass medium programming;
-communicating;
-to;
-and;
-storing at;
-said storage device one;
-or;
-more second instruct signals which;
-are effective;
-to control;
-a user station;
-to receive information;
-to supplement;
-or;
-complete;
-said data;
-file;
-or;
-unit of mass medium programming;
-communicating;
-to;
-and;
-storing at;
-said storage device one;
-or;
-more second instruct signals which;
-are effective;
-to process;

-a digital television signal;
-and;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-a code;
-or;
-datum;
-to serve as;
-a basis for;
-enabling;
-an output device;
-to display at least some of;
-said data;
-file;
-or;
-unit of mass medium programming;
-or;
-for;
-enabling;
-a processor;
-to process some processor;
-code.

Considering claim 15, no support is found for:
-The method of claim 13;
-said method;
-further comprising the steps of:
-selecting one from the group consisting of:
-(1) a datum that identifies;
-a unit of computer software in;
-said signal;
-containing;
-a data;
-file;
-or;
-unit of mass medium programming;

-(2) a datum that specifies some of;
-a way;
-to instruct receiver end equipment;
-what specific programming;
-to select;
-to play;
-or;
-record ;
-other than;
- that immediately at h;
-and;
-, how;
-to load;
-said specific programming on player;
-or;
-recorder equipment;
-when;
-and;
-how;
-to play;
-or;
-record;
-said specific programming ;
-other than;
- immediately;
-how;
-to modify;
-said specific;
-what equipment;
-or;
-channel;
-or;
-channels;
-to transmit;
-said specific on;
-when;
-to transmit;
-said specific programming;
-and;

-how;
-and;
-where;
-to file;
-or;
-refile;
-or;
-dispose of;
-said specific programming;
-(3) a datum that;
-an addressed apparatus in;
-a user station;
-(4) a datum that specifies where;
-when;
-or;
-how;
-to locate;
-a signal;
-(5) a datum that informs;
-a processor;
-of;
-a fashion for;
-identifying;
-and;
-processing;
-a signal;
-(6) a datum that is part of;
-a decryption code;
-(7) a comparison datum that;
-a communication schedule;
-and;
-embedding;
-said selected one in;
-said signal;
-containing;
-a data;
-file;
-or;
-unit of mass medium programming.

Considering claim 16, no support is found for:
-The method of claim 13;
-further comprising the step of;
-storing some information at;
-said storage device;
-to evidence;
-an availability;
-use;
-or;
-usage of;
-said one;
-or;
-more instruct signals;
-said evidence information designating;
-or;
-identifying one;
-or;
-more of:
-(1) a mass medium program;
-(2) a proper use of programming;
-(3) a transmission station;
-(4) a receiver station;
-(5) a network;
-(6) a broadcast station;
-(7) a channel on;
-a cable system;
-(8) a time of transmission;
-(9) an instruct signal;
-(10) a source;
-or;
-supplier of data;
-(11) a distributor;
-or;
-an advertisement;
-and;
-(12) an indication of copyright.

Considering claim 17, no support is found for:
-The method of claim 13;

-wherein;
-said one;
-or;
-more instruct signals comprise;
-downloadable;
-code;
-said method;
-further comprising the steps of:
-selecting;
-a control signal;
-said control signal;
-being;
-one of;
-(1) a switch control signal;
-(2) a timing control signal;
-(3) a locating control signal;
-(4) an instruct-to-contact signal that;
-a remote receiver station;
-(5) an instruct-to-transfer signal that;
-a unit of broadcast;
-or;
-cablecast programming;
-(6) an instruct-to-delay signal that;
-a unit of broadcast;
-or;
-cablecast programming;
-(7) an instruct-to-decrypt;
-or;
-instruct-to-interrupt signal that;
-a unit of programming;
-and;
-a way;
-to decrypt;
-or;
-interrupt;
-(8) an instruct-to-enable;
-or;
-instruct-to-disable signal that;
-an apparatus;

-(9) an instruct-to-record signal that;
-a broadcast;
-or;
-cablecast program;
-(10) a control signal that controls;
-a multimedia;
-presentation;
-(11) a control signal that governs;
-a broadcast;
-or;
-cablecast receiver station environment;
-(12) an instruct-to-power-on signal that;
-a receiver;
-(13) an instruct-to-tune signal that;
-a receiver;
-or;
-a frequency;
-(14) an instruct-to-coordinate signal that;
-two apparatus;
-(15) an instruct-to-compare signal that;
-a news transmission;
-or;
-a computer input;
-(16) an identifier signal that causes;
-a computer;
-to instruct;
-a plurality of tuners each;
-to tune;
-to;
-a broadcast;
-or;
-cablecast transmission;
-(17) an instruct-to-coordinate signal that;
-two units of multimedia;
-information;
-and;
-one of;
-(1) an output time;
-and;

-(2) an output place;
-(18) an instruct-to-generate signal that;
-an output datum;
-(19) an instruct-to-transmit signal that;
-a computer output;
-(20) an instruct-to-overlay signal that;
-a television image;
-(21) an instruct signal that;
-a function;
-to perform if;
-a predetermined condition exists;
-(22) an instruct-to-enable-;
-and;
--deliver signal that;
-information that supplements;
-a television program;
-(23) an instruct-to-transmit signal that;
-a computer peripheral storage device;
-(24) a code signal that;
-a datum;
-to remove;
-or;
-embed;
-and;
-(25) a signal addressed;
-to;
-a receiver station apparatus;
-and;
-embedding;
-said selected control signal in;
-said signal;
-containing;
-a data;
-file;
-or;
-unit of mass medium programming.

Considering claim 18, no support is found for:
-an apparatus for;

-providing;
-a mass medium programming presentation comprising:
-an output device;
-or;
-outputting;
-a mass medium programming presentation;
-to;
-a user;
-a storage device operatively connected;
-to;
-said output device;
-or;
-storing;
-and;
-communicating mass medium program materials;
-and;
-one;
-or;
-more embedded instruct signals effective at the apparatus;
-to supplement;
-or;
-complete;
-said mass medium program materials;
-based on;
-stored data;
-a detector;
-operatively connected;
-to;
-said storage device;
-or;
-detecting;
-said one;
-or;
-more embedded instruct signals;
-and;
-a processor;
-operatively connected;
-to;
-said storage device;

-said output device;
-and;
-said detector;
-for;
-processing data;
-and;
-controlling;
-said storage device;
-and;
-said output device;
-to output;
-said mass medium program materials;
-and;
-the supplemental;
-or;
-completion information in accordance with;
-said embedded instruct signals.

Considering claim 19, no support is found for:
-a transmitter station apparatus comprising:
-a transmitter for;
-transmitting;
-a mass medium programming signal;
-a storage device operatively connected;
-to;
-said transmitter for;
-storing;
-and;
-outputting mass medium program materials;
-and;
-one;
-or;
-more instruct signals effective at;
-a receiver station apparatus;
-to supplement;
-or;
-complete;
-said mass medium program materials;
-based on;

-stored data;
-a detector;
-operatively connected;
-to;
-said storage device;
-or;
-detecting;
-said one;
-or;
-more instruct signals;
-and;
-a computer operatively connected;
-to;
-said storage device;
-and;
-said signal detector;
-for;
-controlling communication of;
-said one;
-or;
-more instruct signals from;
-said storage device;
-to;
-said transmitter.

Considering claim 20, no support is found for:

-The transmitter station apparatus of claim 19;
-further comprising:
-a signal generator;
-operatively connected;
-to;
-said transmitter;
-and;
-said computer for;
-receiving;
-said one;
-or;
-more instruct signals;
-and;

-embedding;
-said one;
-or;
-more instruct signals on mass medium programming signal.

Considering claim 21, no support is found for:
-The method of claim 3;
-wherein;
-said storage device comprises;
-a network.

Considering claim 22, no support is found for:
-The method of claim 3;
-wherein;
-said storage device comprises;
-a memory.

Considering claim 23, no support is found for:
-The method of claim 22;
-wherein;
-said memory comprises;
-a tape.

Considering claim 24, no support is found for:
-The method of claim 22;
-wherein;
-said memory comprises;
-a disk.

Considering claim 25, no support is found for:
-The method of claim 3;
-further comprising the step of;
-communicating;
-one of;
-said television signal;
-and;
-said instruct signal from;
-a first part of;
-said storage device;

-to;
-a second part of;
-said storage device.

Considering claim 26, no support is found for:
-The method of claim 25;
-further comprising the step of;
-reorganizing the storage of;
-said television signal;
-and;
-said instruct signal at;
-said storage device.

Considering claim 27, no support is found for:
-The method of claim 13;
-wherein;
-said storage device comprises;
-a network.

Considering claim 28, no support is found for:
-The method of claim 13;
-wherein;
-said storage device comprises;
-a memory.

Considering claim 29, no support is found for:
-The apparatus of claim 18;
-wherein;
-said storage device comprises;
-a network.

Considering claim 30, no support is found for:
-The apparatus of claim 18;
-wherein;
-said storage device comprises;
-a memory.

Considering claim 31, no support is found for:
-The transmitter station apparatus of claim 19;

-wherein;
-said storage device comprises;
-a network.

Considering claim 32, no support is found for:
-The transmitter station apparatus of claim 19;
-wherein;
-said storage device comprises;
-a memory.

Considering claim 33, no support is found for:
-a method of processing signals;
-to control;
-at least;
-one of;
-a television;
-and;
-a media;
-presentation comprising the steps of:
-receiving;
-a television signal;
-containing first television programming;
-and;
-communicating;
-said television signal;
-and;
-said first television programming;
-to;
-a storage device;
-said first television programming including audio;
-receiving processor;
-instructions which;
-are capable of instructing;
-a computer;
-to present;
-with;
-said first television programming at;
-at least;
-one;

-output device;
-information;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said first television programming;
-selecting;
-at least;
-one of;
-(1) at least;
-one;
-first time at which;
-to communicate;
-said processor;
-instructions;
-and;
-(2) at least;
-one;
-first location;
-to which;
-to communicate;
-said processor;
-instructions;
-communicating;
-said processor;
-instructions;
-to;
-said storage device based on;
-said step of selecting;
-and;
-storing;
-said television signal;
-said first television programming;
-and;
-said processor;
-instructions at;

-said storage device concurrently.

Considering claim 34, no support is found for:
-The method of claim 33;
-further comprising;
-at least;
-one of;
-the steps of:
-embedding;
-said processor;
-instructions in;
-said television signal;
-embedding;
-one of;
-a code;
-and;
-a datum in;
-said first television programming that enables;
-said computer;
-to;
-at least;
-one of;
-locate;
-said processor;
-instructions;
-and;
-to control;
-a presentation of;
-said first television programming in accordance with;
-said processor;
-instructions;
-communicating;
-a program unit identification code;
-to;
-said storage device;
-and;
-storing;
-said program unit identification code at;
-a storage location associated with;

-said television programming;
-communicating;
-to;
-and;
-storing at;
-said storage device information;
-to evidence;
-at least;
-one of;
-an availability;
-use;
-and;
-usage of;
-at least;
-one of;
-said first television programming;
-and;
-said processor;
-instructions at;
-a subscriber station;
-storing at;
-said storage device;
-at least;
-one;
-instruction;
-which is effective;
-at;
-a subscriber station;
-to generate output;
-to be associated with;
-said television programming;
-storing at;
-said storage device;
-at least;
-one;
-instruction;
-which is effective;
-at;
-a subscriber station;

-to display;
-one of;
-a combined;
-and;
-a sequential presentation of;
-said television programming;
-and;
-a subscriber specific datum;
-storing at;
-said storage device;
-at least;
-one;
-instruction;
-which is effective;
-at;
-a subscriber station;
-to process;
-a subscriber reaction;
-to;
-said television programming;
-storing at;
-said storage device;
-at least;
-one;
-instruction;
-which is effective;
-at;
-a subscriber station;
-to;
-one of;
-communicate;
-to;
-a remote station;
-a query in respect of information;
-to be associated with;
-said television programming;
-and;
-to enable display of;
-said television programming;

-storing at;
-said storage device;
-at least;
-one;
-instruction;
-which is effective;
-to control;
-a subscriber station;
-to receive information;
-to supplement;
-said television programming;
-storing at;
-said storage device;
-at least;
-one;
-instruction;
-which is effective;
-at;
-a subscriber station;
-to process;
-a digital television signal;
-and;
-storing at;
-said storage device;
-at least;
-one of;
-a code;
-and;
-a datum;
-to serve as;
-a basis for;
-one of;
-enabling;
-an output device;
-to display at least;
-a portion of;
-said first television programming;
-and;
-enabling;

-said computer;
-to process;
-said processor;
-instructions.

Considering claim 35, no support is found for:
-The method of claim 33;
-wherein;
-said selected;
-at least;
-one;
-first location is in;
-said television signal;
-said method;
-further comprising the steps of:
-storing information at;
-said storage device that evidences;
-at least;
-one;
-from the group consisting of:
-(1) a title of;
-a television program;
-(2) a proper use of programming;
-(3) a transmission station;
-(4) a receiver station;
-(5) a network;
-(6) a broadcast station;
-(7) a channel on;
-a cable system;
-(8) a time of transmission;
-(9) an identification of;
-an instruct signal;
-(10) at least;
-one of;
-a source;
-and;
-supplier of data;
-(11) at least;
-one of;

-a distributor;
-and;
-an advertisement;
-and;
-(12) an indication of copyright.

Considering claim 36, no support is found for:
-The method of claim 33;
-wherein;
-said processor;
-instructions;
-are embedded in;
-said television signal;
-said method;
-further comprising the steps of:
-selecting;
-at least;
-one;
-datum from the group consisting of:
-(1) a datum that identifies processor;
-instructions;
-(2) a datum that specifies;
-a method;
-to instruct receiver end equipment on;
-at least;
-one of;
-(i) what specific programming;
-to;
-at least;
-one of;
-select;
-play;
-and;
-record;
-(ii) how;
-to load;
-said specific programming on;
-at least;
-one of;

-player;
-and;
-recorder equipment;
-(iii) when;
-and;
-how;
-to;
-at least;
-one of;
-play;
-and;
-record;
-said specific programming ;
-other than;
- immediately;
-(iv) how;
-to modify;
-said specific programming;
-(v) which;
-one of;
-equipment;
-channel;
-and;
-channels;
-to transmit;
-said specific programming on;
-(vi) when;
-to transmit;
-said specific programming;
-and;
-(vii) at least;
-one of;
-how;
-and;
-where;
-to;
-one of;
-file;
-refile;

-and;
-dispose of;
-said specific programming;
-(3) a datum that;
-an addressed apparatus;
-(4) a datum that specifies;
-at least;
-one of;
-where;
-when;
-and;
-how;
-to locate;
-said television signal;
-(5) a datum that informs;
-a processor;
-of;
-a fashion for;
-identifying;
-and;
-processing;
-said television signal;
-(6) a datum that is part of;
-a decryption code;
-(7) a datum;
-to be compared;
-to;
-a communication schedule;
-and;
-embedding;
-said selected;
-at least;
-one;
-datum in;
-said television signal;
-and;
-storing;
-said selected;
-at least;

-one;
-datum at;
-said storage device concurrently with;
-said first television programming;
-and;
-said code.

Considering claim 37, no support is found for:
-The method of claim 33;
-wherein;
-said processor;
-instructions include;
-at least;
-one of;
-a code;
-and;
-a datum which enables communication of;
-said processor;
-instructions in;
-a network;
-said method;
-further comprising the steps of:
-selecting;
-an instruction signal;
-said instruction signal including;
-at least;
-one;
-from the group consisting of:
-(1) a switch control signal;
-(2) a timing control signal;
-(3) a locating control signal;
-(4) an instruct-to-contact signal that;
-a remote receiver station;
-(5) an instruct-to-transfer signal that;
-one of;
-broadcast;
-and;
-cablecast programming;
-(6) an instruct-to-delay signal that;

-one of;
-broadcast;
-and;
-cablecast programming;
-(7) at least;
-one of;
-an instruct-to-decrypt;
-and;
-an instruct-to- interrupt signal that;
-programming;
-and;
-a method;
-to;
-one of;
-decrypt;
-and;
-interrupt;
-(8) at least;
-one of;
-an instruct-to-enable;
-and;
-an instruct-to-disable signal that;
-an apparatus;
-(9) an instruct-to-record signal that;
-one of;
-a broadcast;
-and;
-a cablecast program;
-(10) an instruction signal that controls;
-a media;
-presentation;
-(11) an instruction signal that governs;
-one of;
-a broadcast;
-and;
-a cablecast receiver station environment;
-(12) an instruct-to-power-on signal that;
-a receiver;
-(13) an instruct-to-tune signal that;

-at least;
-one of;
-a receiver;
-and;
-a frequency;
-(14) an instruct-to-coordinate signal that;
-two apparatus;
-(15) an instruct-to-compare signal that;
-one of;
-a news transmission;
-and;
-a computer input;
-(16) an identifier signal that causes;
-a computer;
-to instruct;
-a plurality of tuners each;
-to tune;
-to;
-one of;
-a broadcast;
-and;
-a cablecast transmission;
-(17) an instruct-to-coordinate signal that;
-two units of media;
-information;
-and;
-one of;
-(1) an output time;
-and;
-(2) an output place;
-(18) an instruct-to-generate signal that;
-an output datum;
-(19) an instruct-to-transmit signal that;
-a computer output;
-(20) an instruct-to-overlay signal that;
-a television image;
-(21) an instruct-that-if signal that;
-a function;
-to perform if;

-a predetermined condition exists;
-(22) an instruct-to-enable-;
-and;
--deliver signal that;
-information that supplements;
-a television program;
-(23) an instruct-to-transmit signal that;
-a computer peripheral storage device;
-(24) a code signal that;
-a datum;
-to;
-one of;
-remove;
-and;
-embed;
-and;
-(25) a signal addressed;
-to;
-a receiver station apparatus;
-(26) an instruct-to-store signal that;
-at least;
-a portion of;
-a program;
-to be;
-at least;
-one of;
-broadcast;
-and;
-cablecast;
-(27) an instruct-to-transmit signal that;
-at least;
-a portion of;
-a program;
-to be;
-at least;
-one of;
-broadcast;
-and;
-cablecast;

-embedding;
-said selected instruction signal in;
-said television signal;
-and;
-storing;
-said selected instruction signal at;
-said storage device concurrently with;
-said television programming;
-and;
-said processor;
-instructions.

Considering claim 38, no support is found for:
-a method of embedding processor;
-instructions;
-to control;
-a presentation comprising the steps of:
-receiving;
-a program that contains video information;
-said video information including ;
-at least ;
-three full screen ;
-video images;
-to be outputted at;
-a subscriber station in;
-a predetermined sequence;
-receiving;
-said processor;
-instructions;
-and;
-at least;
-one;
-control instruction;
-said processor;
-instructions capable of instructing;
-a subscriber station apparatus;
-to;
-at least;
-one of;

-process;
-and;
-output subscriber specific information pertaining;
-to;
-said program;
-said;
-at least;
-one;
-control instruction capable of causing;
-said subscriber station apparatus;
-to operate under control of;
-said processor;
-instructions;
-commencing communication of;
-said program;
-to;
-a storage device;
-embedding;
-said processor;
-instructions;
-and;
-said;
-at least;
-one;
-control instruction in;
-a signal;
-containing;
-said program while;
-said signal;
-and;
-said program;
-are;
-being;
-communicated;
-and;
-storing;
-said signal;
-containing;
-said program;

-said embedded processor;
-instructions;
-and;
-said embedded;
-at least;
-one;
-control instruction in;
-said storage device.

Considering claim 39, no support is found for:
-The method of claim 38;
-wherein additional program material is;
-to be;
-at least;
-one of;
-processed;
-and;
-outputted at;
-said subscriber station;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said program;
-said method;
-further comprising the steps of:
-storing;
-a control signal;
-said control signal;
-being;
-capable of causing;
-said subscriber station;
-to;
-at least;
-one of;
-(i) query;
-a remote station for;

-said additional program material;
-and;
-(ii) receive;
-said additional program material in;
-at least;
-one of;
-a broadcast;
-and;
-a cablecast transmission.

Considering claim 40, no support is found for:
-The method of claim 38;
-wherein;
-said processor;
-instructions direct;
-said subscriber station;
-to generate;
-at least;
-one;
-video overlay that is;
-to be coordinated with;
-said video information in;
-said program;
-said method;
-further comprising the steps of:
-storing;
-a control signal in conjunction with;
-said program;
-and;
-said processor;
-instructions;
-said control signal capable of causing;
-said subscriber station;
-to perform;
-at least;
-one of;
-(i) transmitting;
-a combined video signal from;
-said program;

-and;
-said video overlay generated by;
-at least;
-one;
-processor;
-over;
-at least;
-one of;
-a broadcast;
-and;
-cablecast network;
-to;
-a plurality of receiver stations;
-and;
-(ii) outputting at;
-a video display;
-a combined video image of;
-(a) at least;
-a portion of;
-said program;
-and;
-(b) said video overlay generated by;
-said;
-at least;
-one;
-processor.

Considering claim 41, no support is found for:
-The method of claim 38;
-further comprising the steps of:
-receiving;
-at least;
-one;
-additional processor;
-instruction;
-said;
-at least;
-one;
-additional processor;

-instruction including;
-at least;
-one of;
-the group consisting of:
-an instruction;
-which is capable of;
-enabling;
-said subscriber station;
-to generate output information content;
-to be associated with;
-said program;
-(2) an instruction;
-which is capable of;
-enabling;
-said subscriber station;
-to generate output;
-to be associated with;
-at least;
-one of;
-a product;
-and;
-a service promoted in;
-said presentation;
-(3) an instruction;
-which is capable of;
-enabling;
-said subscriber station;
-to display;
-in;
-said presentation;
-at least;
-one of;
-a combined;
-and;
-a sequential output of mass medium programming;
-and;
-at least;
-one;
-subscriber station specific datum;

-(4) an instruction;
-which is capable of;
-enabling;
-said subscriber station;
-to respond;
-to;
-a subscriber reaction inputted by;
-at least;
-one of;
-at least;
-one;
-processor;
-and;
-a computer;
-(5) an instruction;
-which is capable of;
-enabling;
-said subscriber station;
-to communicate;
-to;
-a remote station;
-a query for;
-information;
-to enable;
-a display of;
-said presentation;
-(6) an instruction;
-which is capable of;
-enabling;
-said subscriber station;
-to communicate;
-to;
-a remote station;
-an order for;
-at least;
-one of;
-a product;
-and;
-a service;

-at least;
-one of;
-(i) promoted in;
-said video information;
-and;
-(ii) based on;
-a viewer reaction;
-(7) an instruction;
-which is capable of;
-enabling;
-said subscriber station;
-to process;
-a digital television signal;
-and;
-(8) an instruction;
-which is capable of;
-enabling;
-said subscriber station;
-to process;
-said processor;
-instructions;
-embedding;
-said;
-at least;
-one;
-additional processor;
-instruction;
-said step of embedding translating;
-said;
-at least;
-one;
-additional processor;
-instruction;
-to;
-at least;
-one;
-control signal;
-said;
-at least;

-one;
-control signal for;
-directing;
-at least;
-one;
-processor;
-and;
-storing;
-said;
-at least;
-one;
-control signal in conjunction with;
-said program.

Considering claim 42, no support is found for:
-The method of claim 38, further having;
-at least;
-one;
-step from the group consisting of: embedding;
-said processor;
-instructions in;
-a portion of;
-a television signal which is unviewable on;
-a normally tuned television set;
-embedding code in;
-said program that enables;
-at least;
-one of;
-a computer;
-and;
-a controller;
-to control;
-said presentation of;
-said program in accordance with;
-said processor;
-instructions;
-communicating;
-a program unit identification code;
-and;

-storing;
-said program unit identification code at;
-a storage location associated with;
-said program;
-and;
-communicating;
-to;
-and;
-storing at;
-a storage location associated with;
-said program information;
-to evidence;
-at least;
-one of;
-an availability;
-use;
-and;
-usage of;
-said program at;
-said subscriber station.

Considering claim 43, no support is found for:
-a method of processing signals;
-to control;
-a mass medium programming presentation comprising the steps of:
-receiving;
-a signal;
-containing;
-at least;
-one of;
-data;
-and;
-mass medium programming;
-to be outputted in;
-said mass medium programming presentation;
-and;
-communicating;
-said signal;
-to;

-a storage device;
-receiving processor;
-instructions which;
-are capable of controlling;
-a receiver station;
-to present information contained in;
-said signal at;
-an output device;
-and;
-to process;
-a subscriber reaction;
-to information contained in;
-said signal;
-communicating;
-said processor;
-instructions;
-to;
-said storage device;
-receiving;
-at least;
-one;
-first instruction signal;
-which is effective;
-at;
-one of;
-a broadcast;
-and;
-a cablecast transmitter station;
-to communicate;
-said signal;
-and;
-said processor;
-instructions;
-to;
-a transmitter;
-communicating;
-said;
-at least;
-one;

-first instruction signal;
-to;
-said storage device;
-and;
-storing;
-said;
-at least;
-one;
-first instruction signal;
-and;
-said processor;
-instructions at;
-said storage device in association with;
-said;
-at least;
-one of;
-said data;
-and;
-said mass medium programming.

Considering claim 44, no support is found for:
-The method of claim 43;
-wherein;
-one of;
-said data;
-and;
-said mass medium programming comprises;
-one of;
-video;
-audio;
-and;
-text;
-said method;
-further comprising;
-at least;
-one;
-step from the group consisting of: embedding;
-said;
-at least;

-one;
-first instruction signal in;
-said signal;
-embedding;
-a code in;
-one of;
-said data;
-and;
-said mass medium programming that enables;
-a computer;
-to;
-one of;
-receive;
-and;
-output information;
-to supplement;
-one of;
-said data;
-and;
-said mass medium programming in accordance with;
-said;
-at least;
-one;
-first instruction signal;
-communicating;
-a program unit identification code;
-to;
-said storage device;
-and;
-storing;
-said program unit identification code at;
-a storage location associated with;
-one of;
-said data;
-and;
-said mass medium programming presentation;
-communicating;
-to;
-and;

-storing at;
-said storage device information;
-to be processed at;
-a subscriber station;
-to evidence;
-one of;
-an availability;
-use;
-and;
-usage of;
-one of;
-video;
-audio;
-and;
-text associated with;
-at least;
-one of;
-said data;
-and;
-said mass medium programming presentation;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-said;
-at least;
-one;
-first instruction signal;
-which is effective;
-at;
-a subscriber station;
-to select;
-one of;
-said data;
-and;
-said mass medium programming presentation;
-communicating;
-to;

-and;
-storing at;
-said storage device;
-said;
-at least;
-one;
-first instruction signal;
-which is effective;
-at;
-a subscriber station;
-to generate output;
-to be associated with;
-one of;
-said data;
-and;
-said mass medium programming;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-said;
-at least;
-one;
-first instruction signal;
-which is effective;
-to generate output;
-to be associated with;
-one of;
-a product;
-a service;
-and;
-an information presentation;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-said;

-at least;
-one;
-first instruction signal;
-which is effective;
-to display;
-one of;
-a combined;
-and;
-a sequential presentation of;
-a mass medium program;
-and;
-a subscriber specific datum;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-said;
-at least;
-one;
-first instruction signal;
-which is effective;
-to process;
-a subscriber reaction;
-to;
-said mass medium programming presentation;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-said;
-at least;
-one;
-first instruction signal which is;
-one of;
-(i) effective;
-to communicate;
-to;

-a remote station;
-a query in respect of information;
-to be associated with;
-one of;
-said data;
-and;
-said mass medium programming;
-and;
-(ii) effective;
-to display of;
-one of;
-said data;
-and;
-said mass medium programming;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-said;
-at least;
-one;
-first instruction signal;
-which is effective;
-to control;
-a subscriber station;
-to receive information;
-to supplement;
-one of;
-said data;
-and;
-said mass medium programming;
-and;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-one of;

-a code;
-and;
-datum;
-to;
-one of;
-serve as;
-a basis for;
-enabling;
-an output device;
-to display;
-one of;
-at least;
-a portion of;
-said data;
-and;
-said mass medium programming;
-and;
-a processor;
-to process;
-said processor;
-instructions.

Considering claim 45, no support is found for:
-The method of claim 43;
-said method;
-further comprising the steps of:
--;
-a selecting;
-at least;
-one;
-from the group consisting of:
-(1) a datum that identifies computer software in;
-a programming signal;
-(2) a datum that specifies;
-a method;
-to instruct receiver end equipment on;
-at least;
-one of;
-(i) what specific programming;

-to;
-at least;
-one of;
-select;
-play;
-and;
-record;
-(ii) how;
-to load;
-said specific programming on;
-at least;
-one of;
-player;
-and;
-recorder equipment;
-(iii) when;
-and;
-how;
-to;
-at least;
-one of;
-play;
-and;
-record;
-said specific programming ;
-other than;
- immediately;
-(iv) how;
-to modify;
-said specific programming;
-(v) which;
-one of;
-equipment;
-channel;
-and;
-channels;
-to transmit;
-said specific programming on;
-(vi) when;

-to transmit;
-said specific programming;
-and;
-(vii) at least;
-one of;
-how;
-and;
-where;
-to;
-one of;
-file;
-refile;
-and;
-dispose of;
-said specific programming;
-(3) a datum that;
-an addressed apparatus;
-(4) a datum that specifies;
-at least;
-one of;
-where;
-when;
-and;
-how;
-to locate;
-a signal;
-(5) a datum that informs;
-a processor;
-of;
-a fashion for;
-identifying;
-and;
-processing;
-a signal;
-(6) a datum that is part of;
-a decryption code;
-(7) a datum;
-to be compared;
-to;

-a communication schedule;
-and;
-embedding;
-said selected;
-at least;
-one;
-datum in;
-said signal;
-and;
-storing;
-said selected;
-at least;
-one;
-datum at;
-said storage device concurrently with;
-said;
-at least;
-one;
-first instruction signal.

Considering claim 46, no support is found for:
-The method of claim 43;
-further comprising the steps of:
-storing at;
-said storage device concurrently with;
-said;
-at least;
-one;
-first instruction signal information;
-to evidence;
-one of;
-an availability;
-use;
-and;
-usage of;
-said;
-at least;
-one;
-first instruction signal;

-said evidence information;
-one of;
-designating;
-and;
-identifying;
-at least;
-one of;
-(1) a mass medium program;
-(2) a proper use of programming;
-(3) a transmission station;
-(4) a receiver station;
-(5) a network;
-(6) a broadcast station;
-(7) a channel on;
-a cable system;
-(8) a time of transmission;
-(9) an instruct signal;
-(10) a source;
-or;
-supplier of data;
-(11) one of;
-a distributor;
-and;
-an advertisement;
-and;
-(12) an indication of copyright.

Considering claim 47, no support is found for:
-The method of claim 43;
-wherein;
-said;
-at least;
-one;
-first instruction signal comprises;
-downloadable;
-code;
-said method;
-further comprising the steps of:
-selecting;

-at least;
-one;
-second instruction signal;
-said;
-at least;
-one;
-second instruction signal including;
-at least;
-one;
-from the group consisting of:
-(1) a switch control instruction;
-(2) a timing control instruction;
-(3) a locating control signal;
-(4) an instruct-to-contact signal that;
-a remote receiver station;
-(5) an instruct-to-transfer signal that;
-one of;
-broadcast;
-and;
-cablecast programming;
-(6) an instruct-to-delay signal that;
-one of;
-broadcast;
-and;
-cablecast programming;
-(7) at least;
-one of;
-an instruct-to-decrypt;
-and;
-an instruct-to- interrupt signal that;
-programming;
-and;
-a way;
-to;
-at least;
-one of;
-decrypt;
-and;
-interrupt;

-(8) at least;
-one of;
-an instruct-to-enable;
-and;
-instruct-to-disable signal that;
-an apparatus;
-(9) an instruct-to-record signal that;
-at least;
-one of;
-a broadcast;
-and;
-a cablecast program;
-(10) a control signal that controls;
-a media;
-presentation;
-(11) a control signal that governs;
-one of;
-a broadcast;
-and;
-a cablecast receiver station environment;
-(12) an instruct-to-power-on signal that;
-a receiver;
-(13) an instruct-to-tune signal that;
-one of;
-a receiver;
-and;
-a frequency;
-(14) an instruct-to-coordinate signal that;
-at least two apparatus;
-(15) an instruct-to-compare signal that;
-at least;
-one of;
-a news transmission;
-and;
-a computer input;
-(16) an identifier signal that causes;
-a computer;
-to instruct;
-a plurality of tuners each;

-to tune;
-to;
-one of;
-a broadcast;
-and;
-a cablecast transmission;
-(17) an instruct-to-coordinate signal that;
-two units of media;
-information;
-and;
-one of;
-(1) an output time;
-and;
-(2) an output place;
-(18) an instruct-to-generate signal that;
-at least;
-one;
-output datum;
-(19) an instruct-to-transmit signal that;
-at least;
-one;
-computer output;
-(20) an instruct-to-overlay signal that;
-at least;
-one;
-television image;
-(21) an instruct-that-if signal that;
-a function;
-to perform if;
-a predetermined condition exists;
-(22) an instruct-to-enable-;
-and;
--deliver signal that;
-information that;
-at least;
-one of;
-completes;
-and;
-supplements;

-a television program;
-(23) an instruct-to-transmit signal that;
-a computer peripheral storage device;
-(24) a code signal that;
-a datum;
-to;
-one of;
-remove;
-and;
-embed;
-and;
-(25) a signal addressed;
-to;
-a receiver station apparatus;
-(26) an instruct-to-store signal that;
-at least;
-a portion of;
-a program;
-to be;
-at least;
-one of;
-broadcast;
-and;
-cablecast;
-and;
-(27) an instruct-to-transmit signal that;
-at least;
-a portion of;
-a program;
-to be;
-at least;
-one of;
-broadcast;
-and;
-cablecast;
-and;
-embedding;
-said selected;
-at least;

-one;
-second instruction signal in;
-said signal;
-and;
-storing;
-said selected;
-at least;
-one;
-second instruction signal at;
-said storage device concurrently with;
-said;
-at least;
-one;
-first instruction signal.

Considering claim 48, no support is found for:
-a transmitter station apparatus comprising:
-a transmitter for;
-transmitting;
-a mass medium programming signal comprising;
-mass medium;
-program materials;
-downloadable;
-code;
-and;
-at least;
-one;
-instruction signal;
-a storage device operatively connected;
-to;
-said transmitter for;
-storing;
-and;
-outputting;
-said mass medium program materials;
-said;
-downloadable;
-code;
-and;

-said;
-at least;
-one;
-instruction signal;
-a control signal detector;
-operatively connected;
-to;
-said storage device;
-or;
-detecting;
-said;
-at least;
-one;
-instruction signal;
-and;
-a computer operatively connected;
-to;
-said storage device;
-and;
-said control signal detector;
-for;
-controlling communication of;
-one of;
-said mass medium program materials;
-and;
-said;
-downloadable;
-code;
-on the basis of;
-said;
-at least;
-one;
-instruction signal.

Considering claim 49, no support is found for:
-The transmitter station apparatus of claim 48;
-wherein;
-said computer controls;
-said storage device;

-to output;
-said mass medium program materials;
-and;
-said;
-downloadable;
-code;
-to;
-said transmitter on the basis of;
-said;
-at least;
-one;
-instruction signal.

Considering claim 50, no support is found for:
-The transmitter station apparatus of claim 48;
-wherein;
-said computer is operatively connected;
-to;
-said transmitter for;
-communicating;
-said;
-downloadable;
-code;
-said apparatus further comprising:
-a signal generator;
-operatively connected;
-to;
-said computer;
-and;
-said transmitter for;
-receiving;
-said;
-downloadable;
-code;
-and;
-embedding;
-said;
-downloadable;
-code;

-on;
-said mass medium programming signal.

Considering claim 51, no support is found for:
-The transmitter station apparatus of claim 48;
-further comprising;
-a switch operatively connected;
-to;
-said transmitter;
-said storage device;
-and;
-said computer for;
-receiving;
-and;
-communicating at least;
-said mass medium program materials ;
-on the basis of ;
-control instructions ;
-communicated by;
-said computer.

Considering claim 52, no support is found for:
-The method of claim 33;
-wherein;
-said storage device includes;
-at least;
-one of;
-a tape;
-and;
-a disk;
-said method;
-further comprising the steps of:
-communicating;
-said television signal;
-said first television programming;
-and;
-said processor;
-instructions;
-to;

-said;
-at least;
-one of;
-said tape;
-and;
-said disk;
-and;
-storing;
-said television signal;
-said first television programming;
-and;
-said processor;
-instructions at;
-said;
-at least;
-one of;
-said tape;
-and;
-said disk concurrently.

Considering claim 53, no support is found for:
-The method of claim 33;
-further comprising the steps of:
-receiving;
-at least;
-one;
-control instruction which operates;
-to output;
-said television signal;
-said first television programming;
-and;
-said processor;
-instructions from;
-said storage device.

Considering claim 54, no support is found for:
-The method of claim 53;
-wherein;
-said storage device includes;

-a network having;
-at least;
-one;
-transmitter station;
-and;
-at least;
-one;
-receiver station;
-said method;
-further comprising the steps of:
-storing;
-said;
-at least;
-one;
-control instruction in;
-said network.

Considering claim 55, no support is found for:
-The method of claim 54;
-wherein;
-said;
-at least;
-one;
-control instruction includes;
-at least;
-one;
-identifier which identifies;
-at least;
-one of;
-said first television programming;
-and;
-said processor;
-instructions;
-said method;
-further comprising the steps of:
-embedding;
-said;
-at least;
-one;

-control instruction in;
-at least;
-one of;
-said television signal;
-and;
-said processor;
-instructions.

Considering claim 56, no support is found for:
-The method of claim 54;
-wherein;
-said;
-at least;
-one;
-control instruction includes;
-a transmission schedule;
-said method;
-further comprising the steps of:
-communicating;
-said transmission schedule;
-to;
-a computer.

Considering claim 57, no support is found for:
-The method of claim 33;
-wherein;
-said first television programming is of;
-a duration;
-only;
-a portion of;
-said duration;
-containing;
-a time interval;
-of specific relevance;
-and;
-information;
-to;
-at least;
-one of;

-complete;
-and;
-supplement;
-said first television programming is;
-to be presented at;
-said;
-at least;
-one;
-output device within;
-said time interval;
-of specific relevance;
-said method;
-further comprising the steps of:
-embedding;
-at least;
-one of;
-said processor;
-instructions within;
-a part of;
-said television signal which contains;
-said duration of;
-said first television programming.

Considering claim 58, no support is found for:
-The method of claim 57, wherein, based on;
-said step of selecting;
-said method further comprises the steps of:
-embedding;
-said;
-at least;
-one of;
-said processor;
-instructions in;
-a portion of;
-said television signal which is inaudible;
-to;
-a listener when;
-said first television programming is outputted at;
-said;

-at least;
-one;
-output device.

Considering claim 59, no support is found for:
-The method of claim 57;
-wherein;
-said duration of;
-said first television programming includes;
-a multiplicity of video images;
-to be displayed in;
-a predetermined sequence at;
-said;
-at least;
-one;
-output device;
-and;
-wherein;
-based on;
-said step of selecting;
-said method further comprises the steps of:
-embedding;
-said;
-at least;
-one of;
-said processor;
-instructions in;
-a portion of;
-said television signal which is unviewable by;
-a viewer when;
-said first television programming is outputted at;
-said;
-at least;
-one;
-output device.

Considering claim 60, no support is found for:
-The method of claim 59;
-wherein;

-said multiplicity of video images includes;
-full motion video.

Considering claim 61, no support is found for:
-The method of claim 57;
-wherein;
-based on;
-said step of selecting;
-said method further comprises the steps of:
-embedding;
-said;
-at least;
-one of;
-said processor;
-instructions in;
-a portion of;
-said television signal which is outputted from;
-said storage device before the end of;
-said duration.

Considering claim 62, no support is found for:
-The method of claim 57;
-wherein;
-(i) at least;
-a first of;
-said processor;
-instructions is capable of instructing;
-said computer;
-to generate information;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said first television programming;
-and;
-(ii) at least;
-a second of;

-said processor;
-instructions is capable of outputting from;
-said computer at least;
-a portion of;
-said information;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said first television programming;
-said method;
-further comprising the steps of:
-selecting;
-at least;
-one of;
-(1) a second time at which;
-to communicate;
-said processor;
-instructions;
-and;
-(2) a second location;
-to which;
-to communicate;
-said processor;
-instructions;
-and;
-communicating;
-one of;
-(i) said at least;
-said first of;
-said processor;
-instructions;
-and;
-(ii) said at least;
-said second of;
-said processor;
-instructions;

-to;
-said storage device based on;
-said step of selecting;
-at least;
-one of;
-said second time;
-and;
-said second location.

Considering claim 63, no support is found for:
-The method of claim 62;
-wherein second television programming is received;
-only;
-a portion of;
-said second television programming;
-containing;
-a second time;
-of specific relevance;
-and;
-wherein;
-said at least;
-said first of;
-said processor;
-instructions is capable of instructing;
-said computer;
-to generate information;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said second television programming;
-said method;
-further comprising the steps of:
-communicating;
-said second television programming;
-to;
-said storage device;

-and;
-storing;
-said second television programming at;
-said storage device concurrently with;
-said television signal;
-said first television programming;
-and;
-said processor;
-instructions.

Considering claim 64, no support is found for:
-The method of claim 63;
-wherein;
-said first television programming;
-and;
-said second television programming;
-are stored in contiguous television programming in;
-said television signal.

Considering claim 65, no support is found for:
-The method of claim 33;
-wherein;
-said first television programming includes;
-a multiplicity of video images;
-to be outputted in;
-a predetermined sequence at;
-said;
-at least;
-one;
-output device;
-or;
-a period of time;
-a portion of;
-said period of time including;
-a plurality of;
-time intervals of;
-specific relevance;
-a first portion of;
-said information;

-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said first television programming is;
-to be presented at;
-said;
-at least;
-one;
-output device within;
-a first of;
-said plurality;
-of time intervals;
-of specific relevance;
-a second portion of;
-said information;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said first television programming is;
-to be presented at;
-said;
-at least;
-one;
-output device within;
-a second of;
-said plurality;
-of time intervals
-of specific relevance;
-said second of;
-said plurality;
-of time intervals
-of specific relevance;
-being;

-subsequent;
-to;
-said first of;
-said plurality;
-of time intervals
-of specific relevance;
-a first of;
-said processor;
-instructions is capable of presenting at;
-said;
-at least;
-one;
-output device;
-said first portion of;
-said information;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said first television programming;
-and;
-a second of;
-said processor;
-instructions is capable of presenting at;
-said;
-at least;
-one;
-output device;
-said second portion of;
-said information;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said first television programming;

-based on;
-said step of selecting;
-at least;
-one of;
-(i) said;
-at least;
-one;
-first time;
-and;
-(ii) said;
-at least;
-one;
-first location;
-said first;
-and;
-said second of;
-said processor;
-instructions;
-are embedded in;
-a portion of;
-said television signal which is outputted from;
-said;
-at least;
-one;
-output device concurrently with;
-said audio;
-and;
-said multiplicity of video images;
-said first of;
-said processor;
-instructions is embedded in;
-a portion of;
-said television signal ;
-which contains ;
-television programming that is;
- outputted by;
-said;
-at least;
-one;

-output device before the end of;
-said first of;
-said plurality;
-of time intervals
-of specific relevance;
-and;
-said second of;
-said processor;
-instructions is embedded in;
-a portion of;
-said television signal which;
-contains television programming;
-that is outputted by;
-said;
-at least;
-one;
-output device ;
-before the;
-end of;
-said second of;
-said plurality;
-of time intervals
-of specific relevance.

Considering claim 66, no support is found for:
-The method of claim 33;
-wherein;
-said processor;
-instructions generate information;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said first television programming by processing data;
-said method;
-further comprising the steps of:
-receiving;

-said data;
-communicating;
-said data;
-to;
-said storage device;
-and;
-storing;
-said data.

Considering claim 67, no support is found for:
-The method of claim 38;
-wherein;
-said storage device includes;
-at least;
-one of;
-a tape;
-and;
-a disk;
-said method;
-further comprising the steps of:
-communicating;
-a television program;
-said video information;
-and;
-said processor;
-instructions;
-to;
-said;
-at least;
-one of;
-said tape;
-and;
-said disk;
-and;
-storing;
-said television program;
-said video information;
-and;
-processor;

-instructions;
-and;
-said;
-at least;
-one;
-control instruction, at;
-said;
-at least;
-one of;
-said tape;
-and;
-said disk concurrently.

Considering claim 68, no support is found for:
-The method of claim 38;
-further comprising the steps of:
-receiving;
-at least;
-one;
-control signal which operates;
-to output;
-said program;
-said video information;
-said processor;
-instructions;
-and;
-said;
-at least;
-one;
-control instruction from;
-said storage device.

Considering claim 69, no support is found for:
-The method of claim 68;
-wherein;
-said storage device includes;
-a network having;
-at least;
-one;

-transmitter station;
-and;
-at least;
-one;
-receiver station;
-said method;
-further comprising the steps of:
-storing;
-said;
-at least;
-one;
-control signal in;
-said network.

Considering claim 70, no support is found for:
-The method of claim 69;
-wherein;
-said;
-at least;
-one;
-control signal includes;
-at least;
-one;
-identifier which identifies;
-at least;
-one of;
-said program;
-and;
-said processor;
-instructions;
-said method;
-further comprising the steps of:
-embedding;
-said;
-at least;
-one;
-control signal in;
-said signal;
-containing;

-said program.

Considering claim 71, no support is found for:
-The method of claim 69;
-wherein;
-said;
-at least;
-one;
-control instruction includes;
-a transmission schedule;
-said method;
-further comprising the steps of:
-communicating;
-said transmission schedule;
-to;
-a computer.

Considering claim 72, no support is found for:
-The method of claim 38;
-wherein;
-said video information is of;
-a duration;
-only;
-a portion of;
-said duration;
-containing;
-a time interval;
-of specific relevance;
-and;
-said subscriber specific information is;
-to be outputted at;
-said subscriber station at;
-at least;
-one;
-output device within;
-said time interval;
-of specific relevance;
-said method;
-further comprising the steps of:

-embedding;
-at least;
-one of;
-said processor;
-instructions within;
-a part of;
-said signal which contains;
-said duration of;
-said video information.

Considering claim 73, no support is found for:
-The method of claim 72, further comprises the steps of:
-embedding;
-said;
-at least;
-one of;
-said processor;
-instructions in;
-an audio portion of;
-said program which is inaudible;
-to;
-a listener when;
-said video information is outputted at;
-said;
-at least;
-one;
-output device.

Considering claim 73, no support is found for:
-74 The method of claim 72;
-wherein;
-said duration of;
-said video information includes;
-full motion video;
-said method;
-further comprising the steps of:
-embedding;
-said;
-at least;

-one of;
-said processor;
-instructions in;
-a portion of;
-said program which is outputted from;
-said storage device while;
-said full motion video is outputted at;
-said;
-at least;
-one;
-output device.

Considering claim 75, no support is found for:
-The method of claim 74;
-wherein full motion video is communicated in;
-a television signal;
-and;
-said;
-at least;
-one of;
-said processor;
-instructions is embedded in;
-an unviewable;
-and;
-inaudible portion of;
-said television signal.

Considering claim 76, no support is found for:
-The method of claim 72;
-further comprising the steps of:
-embedding;
-said;
-at least;
-one of;
-said processor;
-instructions in;
-a portion of;
-said signal which is outputted from;
-said storage device before the end of;

-said video information contained in;
-said duration is outputted.

Considering claim 77, no support is found for:
-The method of claim 72;
-wherein;
-(i) at least;
-a first of;
-said processor;
-instructions is capable of instructing;
-said computer;
-to generate information;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said video information;
-and;
-(ii) at least;
-a second of;
-said processor;
-instructions is capable of outputting from;
-said computer at least;
-a portion of;
-said information;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said video information;
-said method;
-further comprising the steps of:
-selecting;
-at least;
-one of;

-(1) at least;
-one;
-time at which;
-to communicate;
-said processor;
-instructions;
-and;
-(2) at least;
-one;
-location;
-to which;
-to communicate;
-said processor;
-instructions;
-and;
-embedding;
-at least;
-one of;
-said at least;
-a first of;
-said processor;
-instructions;
-and;
-said at least;
-a second of;
-said processor;
-instructions in;
-said signal based on;
-said step of selecting;
-at least;
-one of;
-said;
-at least;
-one;
-time;
-and;
-said;
-at least;
-one;

-location.

Considering claim 78, no support is found for:
-The method of claim 77;
-wherein additional video is received;
-only;
-a portion of;
-said additional video;
-containing;
-a second time interval;
-of specific relevance;
-and;
-wherein;
-said at least;
-said first of;
-said processor;
-instructions is capable of instructing;
-said computer;
-to generate information;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said additional video;
-said method;
-further comprising the steps of:
-communicating;
-said additional video;
-to;
-said storage device;
-and;
-storing;
-said additional video at;
-said storage device concurrently with;
-said program;
-said video information;
-said processor;

-instructions;
-and;
-said;
-at least;
-one;
-control instruction.

Considering claim 79, no support is found for:
-The method of claim 78;
-wherein;
-said additional video is stored in;
-said storage device in;
-said program immediately following;
-said video information in;
-said program.

Considering claim 80, no support is found for:
-The method of claim 38;
-wherein;
-said at least three video images;
-are;
-to be outputted at;
-at least;
-one;
-output device at;
-said subscriber station for;
-a period of time;
-only;
-a portion of;
-said period of time including;
-a plurality;
-of time intervals
-of specific relevance;
-a first portion of;
-said subscriber specific information is;
-to be outputted at;
-said;
-at least;
-one;

-output device concurrently with at least;
-a first of;
-said at least three video images within;
-a first of;
-said plurality;
-of time intervals
-of specific relevance;
-a second portion of;
-said subscriber specific information is;
-to be outputted at;
-said;
-at least;
-one;
-output device with at least;
-a second of;
-said at least three video images within;
-a second of;
-said plurality;
-of time intervals
-of specific relevance;
-said second of;
-said plurality;
-of time intervals
-of specific relevance;
-being;
-subsequent;
-to;
-said first of;
-said plurality;
-of time intervals
-of specific relevance;
-a first of;
-said processor;
-instructions is capable of outputting at;
-said;
-at least;
-one;
-output device;
-said first portion of;

-said subscriber specific information;
-and;
-a second of;
-said processor;
-instructions is capable of outputting at;
-said;
-at least;
-one;
-output device;
-said second portion of;
-said subscriber specific information;
-and;
-said first;
-and;
-said second of;
-said processor;
-instructions;
-are embedded in;
-a portion of;
-said signal which is outputted from;
-said;
-at least;
-one;
-output device at;
-a time when;
-said;
-at least;
-one;
-output device displays;
-at least;
-one of;
-said three video images;
-said first of;
-said processor;
-instructions is embedded in;
-a portion of;
-said signal which is outputted by;
-said;
-at least;

-one;
-output device before the end of;
-said first of;
-said plurality;
-of time intervals
-of specific relevance;
-and;
-said second of;
-said processor;
-instructions;
-being;
-embedded in;
-a portion of;
-said signal which is outputted by;
-said;
-at least;
-one;
-output device before the end of;
-said second of;
-said plurality;
-of time intervals
-of specific relevance.

Considering claim 81, no support is found for:
-The method of claim 38;
-wherein;
-said processor;
-instructions generate at least;
-a portion of;
-said subscriber specific information by processing data;
-said method;
-further comprising the steps of:
-receiving;
-said data;
-communicating;
-said data;
-to;
-said storage device;
-and;

-storing;
-said data.

Considering claim 82, no support is found for:
-The method of claim 33;
-further comprising the steps of:
-receiving first data;
-communicating;
-said first data;
-to;
-said storage device;
-and;
-storing;
-said first data.

Considering claim 83, no support is found for:
-The method of claim 82;
-wherein;
-said first television programming is of;
-a duration;
-only;
-a portion of;
-said duration;
-containing;
-a time interval;
-of specific relevance;
-said first data;
-are;
-to be processed;
-to generate second data;
-and;
-said second data;
-are;
-to serve as;
-a basis for;
-selecting;
-said information;
-to;
-at least;

-one of;
-complete;
-and;
-supplement;
-said first television programming;
-said method;
-further comprising the step of;
-including in;
-said processor;
-instructions at least;
-a first timing control instruction;
-which is capable of;
-causing;
-a computer;
-to process;
-at least;
-one of;
-said first data;
-at;
-a specific time.

Considering claim 84, no support is found for:
-The method of claim 83;
-wherein;
-said at least;
-said first timing control instruction is capable of causing;
-said computer;
-to query;
-a remote transmitter station for;
-said;
-at least;
-one of;
-said first data;
-before;
-said first television programming is outputted from;
-said storage device.

Considering claim 85, no support is found for:
-The method of claim 83;

-wherein;
-said at least;
-said first timing control instruction is capable of causing;
-said computer;
-to select;
-said;
-at least;
-one of;
-said first data;
-from;
-at least;
-one of;
-a broadcast;
-and;
-a cablecast transmission before;
-said first television programming is outputted from;
-said storage device.

Considering claim 86, no support is found for:
-The method of claim 83;
-wherein;
-said at least;
-said first timing control instruction is capable of causing;
-said computer;
-to process;
-said first data;
-and;
-generate;
-at least;
-one of;
-said second data;
-before the portion of;
-said television signal;
-containing the end of;
-said time interval;
-of specific relevance;
-is outputted from;
-said storage device.

Considering claim 87, no support is found for:
-The method of claim 83;
-further comprising the steps of:
-including in;
-said processor;
-instructions at least;
-a second timing control instruction;
-which is capable of;
-delivering;
-to;
-said;
-at least;
-one;
-output device during;
-said time interval;
-of specific relevance;
-said information;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said first television programming.

Considering claim 88, no support is found for:
-The method of claim 83;
-further comprising the step of;
-including in;
-said processor;
-instructions;
-at least;
-one;
-timing control instruction;
-which is capable of;
-delivering;
-said first television programming;
-to;
-said;

-at least;
-one;
-output device.

Considering claim 89, no support is found for:
-The method of claim 38;
-further comprising the steps of;
-receiving first data;
-communicating;
-said first data;
-to;
-said storage device;
-and;
-storing;
-said first data.

Considering claim 90, no support is found for:
-The method of claim 89;
-wherein;
-said program includes;
-television programming of;
-a duration;
-only;
-a portion of;
-said duration;
-containing;
-a time interval;
-of specific relevance;
-said first data;
-are;
-to be processed;
-to generate second data;
-and;
-said second data;
-are;
-to serve as;
-a basis for;
-selecting;
-said subscriber specific information;

-said method;
-further comprising the step of- including in;
-said processor;
-instructions at least;
-a first timing control instruction;
-which is capable of;
-causing;
-a computer;
-to process;
-at least;
-one of;
-said first data;
-at;
-a specific time.

Considering claim 91, no support is found for:
-The method of claim 90;
-wherein;
-said at least;
-said first timing control instruction is capable of causing;
-said computer;
-to query;
-a remote transmitter station for;
-said;
-at least;
-one of;
-said first data;
-before;
-said television programming is outputted from;
-said storage device.

Considering claim 92, no support is found for:
-The method of claim 90;
-wherein;
-said at least;
-said first timing control instruction is capable of causing;
-said computer;
-to select;
-said;

-at least;
-one of;
-said first data;
-from;
-at least;
-one of;
-a broadcast;
-and;
-a cablecast transmission before;
-said television programming is outputted from;
-said storage device.

Considering claim 93, no support is found for:
-The method of claim 90;
-wherein;
-said at least;
-said first timing control instruction is capable of causing;
-said computer;
-to process;
-said first data;
-and;
-generate;
-at least;
-one of;
-said second data;
-before;
-a portion of;
-a television signal;
-containing the end of;
-said time interval;
-of specific relevance;
-is outputted from;
-said storage device.

Considering claim 94, no support is found for:
-The method of claim 90;
-further comprising the step of;
-including in;
-said processor;

-instructions;
-and;
-said;
-at least;
-one;
-control instruction at least;
-a second timing control instruction;
-which is capable of;
-delivering;
-to;
-at least;
-one;
-output device at;
-said subscriber station;
-during;
-said time interval;
-of specific relevance;
-information;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said television programming.

Considering claim 95, no support is found for:
-The method of claim 90;
-further comprising the step of;
-including in;
-said processor;
-instructions;
-at least;
-one;
-timing control instruction;
-which is capable of;
-delivering;
-said television programming;
-to;

-said;
-at least;
-one;
-output device.

Considering claim 96, no support is found for:
-a method of processing signals;
-to control;
-a multimedia;
-presentation comprising the steps of:
-receiving;
-a television signal;
-containing television programming;
-and;
-communicating;
-said television signal;
-and;
-said television programming;
-to;
-at least;
-one;
-storage device;
-said television programming consisting of audio;
-and;
-a plurality of video images;
-to be displayed in;
-at least;
-one;
-predetermined sequence;
-said;
-at least;
-one;
-predetermined sequence including full motion video;
-receiving;
-at least;
-one;
-first instruction signal;
-which is capable of;
-instructing;

-a computer;
-to conduct;
-a procedure of;
-at least;
-one of;
-inputting;
-and;
-responding;
-to;
-a viewer reaction;
-to;
-said television programming;
-selecting;
-at least;
-one of;
-(1) at least;
-one;
-time at which;
-to communicate;
-said first instruction signal;
-and;
-(2) at least;
-one;
-first location;
-to which;
-to communicate;
-said first instruction signal;
-communicating;
-said;
-at least;
-one;
-first instruction signal;
-(i) at;
-said;
-at least;
-one;
-selected time;
-and;
-(ii) to;

-said selected;
-at least;
-one;
-first location;
-based on;
-said step of selecting;
-and;
-storing;
-said television signal;
-said television programming;
-and;
-said;
-at least;
-one;
-first instruction signal at;
-said;
-at least;
-one;
-storage device concurrently.

Considering claim 97, no support is found for:
-The method of claim 96;
-further comprising;
-at least;
-one of;
-the steps of:
-embedding;
-said first instruction signal in;
-said television signal;
-embedding;
-at least;
-one of;
-a first code;
-and;
-a first datum in;
-said television programming that enables;
-said computer;
-to locate;
-at least;

-one of;
-a second code;
-and;
-a second datum;
-communicating;
-a program unit identification code;
-to;
-said storage device;
-and;
-storing;
-said program unit identification code at;
-a storage location associated with;
-said television programming;
-communicating;
-to;
-and;
-storing at;
-said storage device information;
-to evidence;
-at least;
-one of;
-an availability;
-use;
-and;
-usage of;
-at least;
-one of;
-said television programming;
-said first instruction signal;
-and;
-executable code at;
-a subscriber station;
-storing at;
-said storage device;
-a second instruction signal;
-which is effective;
-at;
-a subscriber station;
-to generate output information content;

-to be associated with;
-said television programming;
-storing at;
-said storage device;
-a second instruction signal;
-which is effective;
-at;
-a subscriber station;
-to display;
-at least;
-one of;
-a combined;
-and;
-a sequential presentation of;
-said television programming;
-and;
-at least;
-one;
-subscriber specific datum;
-storing at;
-said storage device;
-a second instruction signal;
-which is capable of;
-enabling;
-a subscriber station;
-to respond;
-to;
-a subscriber reaction inputted by;
-at least;
-one of;
-said computer;
-and;
-a processor;
-storing at;
-said storage device;
-a second instruction signal;
-which is capable of;
-enabling;
-a subscriber station;

-to communicate;
-to;
-a remote station;
-a query in respect of information;
-at least;
-one of;
-(1) to be associated with;
-said television programming;
-and;
-(ii) to enable display of;
-said television programming;
-storing at;
-said storage device;
-a second instruction signal;
-which is effective;
-to control;
-a subscriber station;
-to receive information;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said television programming;
-- storing at;
-said storage device;
-a second instruction signal;
-which is effective;
-at;
-a subscriber station;
-to process;
-a digital television signal;
-and;
-storing at;
-said storage device;
-said;
-at least;
-one of;

-said first code;
-and;
-said first datum;
-to serve as;
-a basis for;
-enabling;
-at least;
-one of;
-(i) an output device;
-to display at least;
-a portion of;
-said television programing;
-and;
-said computer;
-to process;
-said executable code.

Considering claim 98, no support is found for:
-The method of claim 96;
-wherein;
-said selected;
-at least;
-one;
-first location is in;
-said television signal;
-said method;
-further comprising the steps of:
-storing at;
-said storage device concurrently with;
-said television programming;
-and;
-said first instruction signal information that evidences;
-at least;
-one;
-from the group consisting of:
-(1) a title of;
-a television program;
-(2) a proper use of programming;
-(3) a transmission station;

-(4) a receiver station;
-(5) a network;
-(6) a broadcast station;
-(7) a channel on;
-a cable system;
-(8) a time of transmission;
-(9) an identification of;
-an instruction signal;
-(10) at least;
-one of;
-a source;
-and;
-a supplier of data;
-(11) at least;
-one of;
-a distributor;
-and;
-an advertisement;
-and;
-(12) an indication of copyright.

Considering claim 99, no support is found for:
-The method of claim 96;
-wherein;
-said first instruction signal is embedded in;
-said television signal;
-said method;
-further comprising the steps of:
-selecting;
-at least;
-one;
-from the group consisting of:
-(1) a datum that identifies computer software in;
-said television signal;
-(2) a datum that specifies;
-a method;
-to instruct receiver end equipment on;
-at least;
-one of;

-(i) what specific programming;
-to;
-at least;
-one of;
-select;
-play;
-and;
-record;
-(ii) how;
-to load;
-said specific programming on;
-at least;
-one of;
-player;
-and;
-recorder equipment;
-(iii) when;
-and;
-how;
-to;
-at least;
-one of;
-play;
-and;
-record;
-said specific programming ;
-other than;
- immediately;
-(iv) how;
-to modify;
-said specific programming;
-(v) which;
-one of;
-equipment;
-channel;
-and;
-channels;
-to transmit;
-said specific programming on;

-(vi) when;
-to transmit;
-said specific programming;
-and;
-(vii) at least;
-one of;
-how;
-and;
-where;
-to;
-one of;
-file;
-refile;
-and;
-dispose of;
-said specific programming;
-(3) a datum that;
-an addressed apparatus;
-(4) a datum that specifies;
-at least;
-one of;
-where;
-when;
-and;
-how;
-to locate;
-a signal;
-(5) a datum that informs;
-a processor;
-of;
-a fashion for;
-identifying;
-and;
-processing;
-a signal;
-(6) a datum that is part of;
-a decryption code;
-(7) a datum;
-to be compared;

-to;
-a communication schedule;
-and;
-embedding;
-said selected;
-at least;
-one;
-datum in;
-said television signal;
-and;
-storing;
-said selected;
-at least;
-one;
-datum at;
-said storage device concurrently with;
-said television programming;
-and;
-said first instruction signal.

Considering claim 100, no support is found for:
-The method of claim 96;
-wherein;
-said first instruction signal includes;
-code;
-said method;
-further comprising the steps of:
-selecting;
-at least;
-one;
-second instruction signal;
-said;
-at least;
-one;
-second instruction signal including;
-at least;
-one;
-from the group consisting of:
-(1) a switch control signal;

-(2) a timing control signal;
-(3) a locating control signal;
-(4) an instruct-to-contact signal that;
-a remote receiver station;
-(5) an instruct-to-transfer signal that;
-one of;
-broadcast;
-and;
-cablecast programming;
-(6) an instruct-to-delay signal that;
-one of;
-broadcast;
-or;
-cablecast programming;
-(7) at least;
-one of;
-an instruct-to-decrypt;
-and;
-an instruct-to-interrupt signal that;
-programming;
-and;
-a way;
-to;
-at least;
-one of;
-decrypt;
-and;
-interrupt;
-(8) at least;
-one of;
-an instruct-to-enable;
-and;
-an instruct-to-disable signal that;
-an apparatus;
-(9) an instruct-to-record signal that;
-at least;
-one of;
-a broadcast;
-and;

-a cablecast program;
-(10) a control signal that controls;
-a multimedia;
-presentation;
-(11) an instruction signal that governs;
-at least;
-one of;
-a broadcast;
-and;
-a cablecast receiver station environment;
-(12) an instruct-to-power-on signal that;
-a receiver;
-(13) an instruct-to-tune signal that;
-at least;
-one of;
-a receiver;
-and;
-a frequency;
-(14) an instruct-to-coordinate signal that;
-at least two apparatus;
-(15) an instruct-to-compare signal that;
-at least;
-one of;
-a news transmission;
-and;
-a computer input;
-(16) an identifier signal that causes;
-a computer;
-to instruct;
-a plurality of tuners each;
-to tune;
-to;
-at least;
-one of;
-a broadcast;
-and;
-a cablecast transmission;
-(17) an instruct-to-coordinate signal that;
-at least two portions of information;

-and;
-at least;
-one of;
-(1) an output time;
-and;
-(2) an output place;
-(18) an instruct-to-generate signal that;
-at least;
-one;
-output datum;
-(19) an instruct-to-transmit signal that;
-at least;
-one;
-computer output;
-(20) an instruct-to-overlay signal that;
-at least;
-one;
-television image;
-(21) an instruct-that-if signal that;
-a function;
-to perform if;
-a predetermined condition exists;
-(22) an instruct-to-enable-;
-and;
--deliver signal that;
-information that;
-at least;
-one of;
-completes;
-and;
-supplements;
-a television program;
-(23) an instruct-to-transmit signal that;
-a computer peripheral storage device;
-(24) a code signal that;
-at least;
-one;
-datum;
-to;

-at least;
-one of;
-remove;
-and;
-embed;
-(25) a signal addressed;
-to;
-a receiver station apparatus;
-(26) an instruct-to-store signal that;
-at least;
-a portion of;
-a program;
-to be;
-at least;
-one of;
-broadcast;
-and;
-cablecast;
-(27) an instruct-to-transmit signal that;
-at least;
-a portion of;
-a program;
-to be;
-at least;
-one of;
-broadcast;
-and;
-cablecast;
-embedding;
-said selected;
-at least;
-one;
-second instruction signal in;
-said television signal;
-and;
-storing;
-said selected;
-at least;
-one;

-second instruction signal at;
-said;
-at least;
-one;
-storage device concurrently with;
-said television programming;
-and;
-said first instruction signal.

Considering claim 101, no support is found for:
-a method of;
- encoding signals;
-to control;
-a presentation comprising the steps of:
-receiving;
-and;
-storing;
-a program that contains ;
-video;
- information;
-said video information including ;
-at least ;
-three;
- full-screen;
- video ;
-images;
-to be outputted at;
-a subscriber station in;
-a predetermined sequence;
-receiving;
-at least;
-one;
-first instruction;
-which is capable of;
-instructing;
-at least;
-one;
-processor;
-at;

-said subscriber station;
-to;
-at least;
-one of;
-input;
-and;
-respond;
-to;
-a viewer reaction;
-to;
-said program;
-encoding;
-said;
-at least;
-one;
-first instruction;
-said step of encoding translating;
-said;
-at least;
-one;
-first instruction;
-to;
-a control signal;
-said control signal for;
-directing;
-said;
-at least;
-one;
-processor;
-at;
-said subscriber station;
-and;
-storing;
-said control signal from;
-said step of encoding in conjunction with;
-said program.

Considering claim 102, no support is found for:
-The method of claim 101;

-wherein additional program material is;
-to be outputted at;
-said subscriber station;
-to;
-at least;
-one of;
-complete;
-and;
-supplement;
-said program;
-said method;
-further comprising the steps of:
-storing;
-a second control signal in conjunction with;
-said program;
-and;
-said control signal from;
-said step of encoding;
-said second control signal;
-being;
-capable of causing;
-said subscriber station;
-to;
-at least;
-one of;
-(i) query;
-a remote station for;
-said additional program material;
-and;
-(ii) receive;
-said additional program material in;
-at least;
-one of;
-a broadcast;
-and;
-a cablecast transmission.

Considering claim 103, no support is found for:
-The method of claim 101;

-wherein;
-said control signal from;
-said step of encoding directs;
-said;
-at least;
-one;
-processor;
-to generate;
-a video overlay that is;
-to be coordinated in;
-said presentation with;
-said video information in;
-said program;
-said method;
-further comprising the steps of:
-storing;
-a second control signal in conjunction with;
-said program;
-and;
-said control signal;
-said second control signal capable of causing;
-said subscriber station;
-to perform;
-at least;
-one of;
-(i) transmitting;
-a combined video signal from;
-said program;
-and;
-said video overlay generated by;
-said;
-at least;
-one;
-processor;
-over;
-a broadcast;
-or;
-cablecast network;
-to;

-a plurality of receiver stations;
-and;
-(ii) outputting at;
-a video display;
-a combined video image of;
-(a) at least;
-a portion of;
-said program;
-and;
-(b) said video overlay generated by;
-said;
-at least;
-one;
-processor.

Considering claim 104, no support is found for:
-The method of claim 101;
-further comprising the steps receiving;
-at least;
-one;
-second instruction;
-said;
-at least;
-one;
-second instruction including;
-at least;
-one of;
-the group consisting of:
-(1) an instruction;
-which is capable of;
-enabling;
-said subscriber station;
-to generate output information content;
-to be associated with;
-said program;
-(2) an instruction;
-which is capable of;
-enabling;
-said subscriber station;

-to generate output;
-to be associated with;
-at least;
-one of;
-a product;
-and;
-a service promoted in;
-said presentation;
-(3) an instruction;
-which is capable of;
-enabling;
-said subscriber station;
-to display;
-in;
-said presentation;
-at least;
-one of;
-a combined;
-and;
-a sequential output of mass medium programming;
-and;
-at least;
-one;
-subscriber station specific datum;
-(4) an instruction;
-which is capable of;
-enabling;
-said subscriber station;
-to respond;
-to;
-a subscriber reaction inputted by;
-at least;
-one of;
-said;
-at least;
-one;
-processor;
-and;
-a computer;

-(5) an instruction;
-which is capable of;
-enabling;
-said subscriber station;
-to communicate;
-to;
-a remote station;
-a query for;
-information;
-to enable display of;
-said presentation;
-(6) an instruction;
-which is capable of;
-enabling;
-said subscriber station;
-to communicate;
-to;
-a remote station;
-an order for;
-a product;
-or;
-service;
-at least;
-one of;
-(i) promoted in;
-said video information;
-and;
-(ii) based on;
-said viewer reaction;
-(7) an instruction;
-which is capable of;
-enabling;
-said subscriber station;
-to process;
-a digital television signal;
-and;
-(8) an instruction;
-which is capable of;
-enabling;

-said subscriber station;
-to serve as;
-a basis for;
-enabling;
-said;
-at least;
-one;
-processor;
-to process executable code;
-encoding;
-said;
-at least;
-one;
-second instruction;
-said step of encoding translating;
-said;
-at least;
-one;
-second instruction;
-to;
-at least;
-one;
-second control signal;
-said;
-at least;
-one;
-second control signal for;
-directing;
-said;
-at least;
-one;
-processor;
-and;
-storing;
-said;
-at least;
-one;
-second control signal in conjunction with;
-said program.

Considering claim 105, no support is found for:

-The method of claim 101, further having;
-at least;
-one;
-step from the group consisting of: embedding;
-said control signal in;
-a portion of;
-a television signal which is not visible on;
-a normally tuned television set;
-embedding code in;
-said program that enables;
-at least;
-one of;
-a computer;
-and;
-a controller;
-to control;
-a presentation of;
-said program in accordance with;
-said control signal;
-communicating;
-a program unit identification code;
-and;
-storing;
-said program unit identification code at;
-a storage location associated with;
-said program;
-and;
-communicating;
-to;
-and;
-storing at;
-a storage location associated with;
-said program some information;
-to evidence;
-at least;
-one of;
-an availability;
-use;

-and;
-usage of;
-said program at;
-said subscriber station.

Considering claim 106, no support is found for:
-a method of processing signals;
-to control;
-a mass medium programming presentation comprising the steps of:
-receiving;
-a signal;
-containing;
-one of;
-a data;
-file;
-and;
-mass medium programming;
-and;
-communicating;
-said signal;
-to;
-a storage device;
-receiving;
-at least;
-one;
-first instruction signal;
-which is capable of;
-controlling;
-a subscriber station;
-to;
-one of;
-input;
-and;
-respond;
-to;
-a viewer reaction;
-to information contained in;
-said signal;
-and;

-to communicate at least;
-a portion of;
-said signal;
-to;
-a transmitter;
-communicating;
-said;
-at least;
-one;
-first instruction signal;
-to;
-said storage device;
-and;
-storing;
-said;
-at least;
-one;
-first instruction signal at;
-said storage device in association with;
-said;
-one of;
-said data;
-file;
-and;
-said mass medium programming.

Considering claim 107, no support is found for:
-The method of claim 106;
-wherein;
-said signal comprises;
-one of;
-video;
-audio;
-and;
-text;
-said method;
-further comprising;
-at least;
-one;

-step from the group consisting of: embedding;
-said;
-at least;
-one;
-first instruction signal in;
-said signal;
-embedding;
-a code in;
-said;
-one of;
-said data;
-file;
-and;
-said mass medium programming that enables;
-one of;
-a processor;
-and;
-a computer;
-to;
-one of;
-receive;
-and;
-output information;
-to supplement;
-said;
-one of;
-said data;
-file;
-and;
-said mass medium programming in accordance with;
-said;
-at least;
-one;
-first instruction signal;
-communicating;
-a program unit identification code;
-to;
-said storage device;
-and;

-storing;
-said program unit identification code at;
-a storage location associated with;
-said;
-one of;
-said data;
-file;
-and;
-said mass medium programming;
-communicating;
-to;
-and;
-storing at;
-said storage device information;
-to be processed at;
-a subscriber station;
-to evidence;
-one of;
-an availability;
-use;
-and;
-usage of;
-one of;
-video;
-audio;
-and;
-text associated with;
-said;
-one of;
-said data;
-file;
-and;
-said mass medium programming;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-an instruct signal;

-which is effective;
-at;
-a subscriber station;
-to select;
-said;
-one of;
-said data;
-file;
-and;
-said mass medium programming;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-an instruct signal;
-which is effective;
-at;
-a subscriber station;
-to generate output;
-to be associated with;
-said;
-one of;
-said data;
-file;
-and;
-said mass medium programming;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-an instruct signal;
-which is effective;
-to generate output;
-to be associated with;
-one of;
-a product;
-service;

-and;
-an information presentation;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-an instruct signal;
-which is effective;
-to display;
-one of;
-a combined;
-and;
-sequential presentation of;
-a mass medium program;
-and;
-a subscriber specific datum;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-an instruct signal;
-which is effective;
-to process;
-a subscriber reaction;
-to;
-said;
-one of;
-said data;
-file;
-and;
-said mass medium programming;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-an instruct signal;

-which is effective;
-to;
-one of;
-communicate;
-to;
-a remote station;
-a query in respect of information;
-to be associated with;
-said;
-one of;
-said data;
-file;
-and;
-said mass medium programming;
-and;
-to enable display of;
-said;
-one of;
-said data;
-file;
-and;
-said mass medium programming;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-an instruct signal;
-which is effective;
-to control;
-a subscriber station;
-to receive information;
-to supplement;
-said;
-one of;
-said data;
-file;
-and;
-said mass medium programming;

-communicating;
-to;
-and;
-storing at;
-said storage device;
-an instruct signal;
-which is effective;
-to process;
-a digital television signal;
-and;
-communicating;
-to;
-and;
-storing at;
-said storage device;
-one of;
-a code;
-and;
-a datum;
-to serve as;
-a basis for;
-one of;
-enabling;
-an output device;
-to display at least;
-a portion of;
-said;
-one of;
-said data;
-file;
-and;
-said mass medium programming;
-and;
-for;
-enabling;
-a processor;
-to process code.

Considering claim 108, no support is found for:

-The method of claim 106;
-said method;
-further comprising the steps of:
-selecting;
-at least;
-one;
-from the group consisting of:
-(1) a datum that identifies computer software in;
-a television signal;
-(2) a datum that specifies;
-a method;
-to instruct receiver end equipment on;
-at least;
-one of;
-(i) what specific programming;
-to;
-at least;
-one of;
-select;
-play;
-and;
-record;
-(ii) how;
-to load;
-said specific programming on;
-at least;
-one of;
-player;
-and;
-recorder equipment;
-(iii) when;
-and;
-how;
-to;
-at least;
-one of;
-play;
-and;
-record;

-said specific programming ;
-other than;
-an immediately;
-(iv) how;
-to modify;
-said specific programming;
-(v) which;
-one of;
-equipment;
-channel;
-and;
-channels;
-to transmit;
-said specific programming on;
-(vi) when;
-to transmit;
-said specific programming;
-and;
-(vii) at least;
-one of;
-how;
-and;
-where;
-to;
-one of;
-file;
-refile;
-and;
-dispose of;
-said specific programming;
-(3) a datum that;
-an addressed apparatus;
-(4) a datum that specifies;
-at least;
-one of;
-where;
-when;
-and;
-how;

-to locate;
-a signal;
-(5) a datum that informs;
-a processor;
-of;
-a fashion for;
-identifying;
-and;
-processing;
-a signal-;
-(6) a datum that is part of;
-a decryption code;
-(7) a datum;
-to be compared;
-to;
-a communication schedule;
-and;
-embedding;
-said selected;
-at least;
-one;
-datum in;
-said signal;
-and;
-storing;
-said selected;
-at least;
-one;
-datum at;
-said storage device concurrently with;
-said;
-at least;
-one;
-first instruction signal.

Considering claim 109, no support is found for:
-The method of claim 106;
-further comprising the steps of:
-storing at;

-said storage device concurrently with;
-said;
-at least;
-one;
-first instruction signal information;
-to evidence;
-one of;
-an availability;
-use;
-and;
-usage of;
-said;
-at least;
-one;
-first instruction signal;
-said evidence information;
-one of;
-designating;
-and;
-identifying;
-at least;
-one of;
-(1) a mass medium program;
-(2) a proper use of programming;
-(3) a transmission station;
-(4) a receiver station;
-(5) a network;
-(6) a broadcast station;
-(7) a channel on;
-a cable system;
-(8) a time of transmission;
-(9) an instruct signal;
-(10) a source;
-or;
-supplier of data;
-(11) one of;
-a distributor;
-and;
-an advertisement;

-and;
-(12) an indication of copyright.

Considering claim 110, no support is found for:
-The method of claim 106;
-wherein;
-said;
-at least;
-one;
-first instruction signal comprises;
-downloadable;
-code;
-said method;
-further comprising the steps of:
-selecting;
-at least;
-one;
-second instruction signal;
-said;
-at least;
-one;
-second instruction signal including;
-at least;
-one;
-from the group consisting of:
-(1) a switch control instruction;
-(2) a timing control instruction;
-(3) a locating control signal;
-(4) an instruct-to-contact signal that;
-a remote receiver station;
-(5) an instruct-to-transfer signal that;
-one of;
-broadcast;
-and;
-cablecast programming;
-(6) an instruct-to-delay signal that;
-one of;
-broadcast;
-and;

-cablecast programming;
-(7) at least;
-one of;
-an instruct-to-decrypt;
-and;
-an instruct-to-interrupt signal that;
-programming;
-and;
-a way;
-to;
-at least;
-one of;
-decrypt;
-and;
-interrupt;
-(8) at least;
-one of;
-an instruct-to-enable;
-and;
-an instruct-to-disable signal that;
-an apparatus;
-(9) an instruct-to-record signal that;
-at least;
-one of;
-a broadcast;
-and;
-a cablecast program;
-(10) a control signal that controls;
-a multimedia;
-presentation;
-(11) an instruction signal that governs;
-at least;
-one of;
-a broadcast;
-and;
-a cablecast receiver station environment;
-(12) an instruct-to-power-on signal that;
-a receiver;
-(13) an instruct-to-tune signal that;

-at least;
-one of;
-a receiver;
-and;
-a frequency;
-(14) an instruct-to-coordinate signal that;
-at least two apparatus;
-(15) an instruct-to-compare signal that;
-at least;
-one of;
-a news transmission;
-and;
-a computer input;
-(16) an identifier signal that causes;
-a computer;
-to instruct;
-a plurality of tuners each;
-to tune;
-to;
-at least;
-one of;
-a broadcast;
-and;
-a cablecast transmission;
-(17) an instruct-to-coordinate signal that;
-at least two portions of information;
-and;
-at least;
-one of;
-(1) an output time;
-and;
-(2) an output place;
-(18) an instruct-to-generate signal that;
-at least;
-one;
-output datum;
-(19) an instruct-to-transmit signal that;
-at least;
-one;

-computer output;
-(20) an instruct-to-overlay signal that;
-at least;
-one;
-television image;
-(21) an instruct-that-if signal that;
-a function;
-to perform if;
-a predetermined condition exists;
-(22) an instruct-to-enable-;
-and;
--deliver signal that;
-information that;
-at least;
-one of;
-completes;
-and;
-supplements;
-a television program;
-(23) an instruct-to-transmit signal that;
-a computer peripheral storage device;
-(24) a code signal that;
-at least;
-one;
-datum;
-to;
-at least;
-one of;
-remove;
-and;
-embed;
-(25) a signal addressed;
-to;
-a receiver station apparatus;
-(26) an instruct-to-store signal that;
-at least;
-a portion of;
-a program;
-to be;

-at least;
-one of;
-broadcast;
-and;
-cablecast;
-(27) an instruct-to-transmit signal that;
-at least;
-a portion of;
-a program;
-to be;
-at least;
-one of;
-broadcast;
-and;
-cablecast;
-embedding;
-said selected;
-at least;
-one;
-second instruction signal in;
-said signal;
-and;
-storing;
-said selected;
-at least;
-one;
-second instruction signal at;
-said storage device concurrently with;
-said;
-at least;
-one;
-first instruction signal.

Considering claim 111, no support is found for:
-a mass medium programming output apparatus comprising:
-an input device;
-or;
-inputting;
-a user reaction;

-to;
-a mass medium programming presentation;
-at least;
-one;
-storage device operatively connected;
-to;
-said input device;
-or;
-storing;
-a signal;
-containing;
-(i) mass medium program materials;
-and;
-(ii) at least;
-one;
-embedded instruction signal for;
-a variable time period;
-and;
-outputting;
-said signal;
-a control signal detector;
-operatively connected;
-to;
-said storage device;
-or;
-detecting;
-said;
-at least;
-one;
-embedded instruction signal;
-and;
-a processor;
-operatively connected;
-to;
-said input device;
-said;
-at least;
-one;
-storage device;

-and;
-said control signal detector;
-for;
-processing;
-said input user reaction in response;
-to;
-said;
-at least;
-one;
-embedded instruction signal;
-and;
-for;
-controlling;
-said;
-at least;
-one;
-storage device;
-to output.

Considering claim 112, no support is found for:
-a transmitter station apparatus comprising:
-an input device;
-or;
-inputting;
-a user reaction;
-to mass medium programming;
-a transmitter for;
-transmitting information;
-to;
-a remote station;
-at least;
-one;
-storage device operatively connected;
-to;
-said transmitter for;
-storing data;
-and;
-at least;
-one;

-instruction signal for;
-a variable time period;
-and;
-communicating;
-said data;
-and;
-said at least instruction signal;
-a control signal detector;
-operatively connected;
-to;
-said at least;
-said storage device;
-or;
-detecting;
-said;
-at least;
-one;
-instruction signal;
-and;
-a processor;
-operatively connected;
-to;
-said input device;
-said control signal detector;
-and;
-said at least;
-said storage device;
-or;
-processing;
-said user reaction in response;
-to;
-said;
-at least;
-one;
-instruction signal;
-and;
-or;
-controlling;
-said;

-at least;
-one;
-storage device;
-to communicate;
-at least;
-one of;
-said data;
-to;
-said transmitter.

Considering claim 113, no support is found for:
-The apparatus of claim 112;
-wherein;
-said transmitter includes;
-a telephone connection;
-said apparatus further comprising:
-an auto dialer operatively connected;
-to;
-said telephone connection for;
-initiating communications with;
-said remote station.

Considering claim 114, no support is found for:
-The apparatus of claim 112;
-wherein;
-said mass medium programming is contained in;
-a signal transmitted from;
-a remote transmitter station;
-said apparatus further comprising:
-a receiver for;
-receiving;
-said signal;
-and;
-an output device operatively connected;
-to;
-said receiver for;
-outputting;
-said mass medium programming;
-to;

-said user.

Considering claim 115, no support is found for:
-The apparatus of claim 114;
-wherein;
-said control signal detector;
-is operatively connected;
-to;
-said receiver.

Considering claim 116, no support is found for:
-The apparatus of claim 112, further comprising:
-a second storage device;
-or;
-storing;
-and;
-communicating;
-said mass medium programming;
-and;
-an output device operatively connected;
-to;
-said second storage device;
-or;
-outputting;
-said mass medium programming;
-to;
-said user.

Considering claim 117, no support is found for:
-The apparatus of claim 116;
-wherein;
-said control signal detector;
-is operatively connected;
-to;
-said second storage device.

Considering claim 118, no support is found for:
-The apparatus of claim 116;
-wherein;

-said control signal detector;
-is operatively connected;
-to;
-said input device;
-and;
-said;
-at least;
-one;
-instruction signal includes;
-said user reaction.

Considering claim 119, no support is found for:
-The method of claim 96;
-wherein;
-said selected;
-at least;
-one;
-first location includes;
-a memory location at;
-said;
-at least;
-one;
-storage device;
-and;
-said step of communicating;
-said;
-at least;
-one;
-first instruction signal further comprises: communicating at least;
-a portion of;
-said;
-at least;
-one;
-first instruction signal;
-to;
-said memory location.

Considering claim 120, no support is found for:
-The method of claim 119;

-wherein;
-said;
-at least;
-one;
-storage device contains;
-at least;
-one of;
-a disk;
-and;
-a tape;
-and;
-said memory location is contained within;
-said;
-at least;
-one of;
-said disk;
-and;
-said tape.

Considering claim 121, no support is found for:
-The method of claim 120;
-wherein;
-said television signal;
-said television programming;
-and;
-said;
-at least;
-one;
-first instruction signal;
-are stored concurrently on;
-one of;
-said;
-at least;
-one of;
-said tape;
-and;
-said disk.

Considering claim 122, no support is found for:

-The method of claim 121;
-wherein only some of;
-an audible portion of;
-said television programming prompts for;
-input of;
-said subscriber reaction;
-said method;
-further comprising the steps of:
-selecting;
-at least;
-one;
-second location;
-to which;
-to communicate;
-said at least;
-said first instruction signal;
-said;
-at least;
-one;
-second location;
-being;
-within;
-said television signal but outside;
-said audible portion;
-and;
-embedding;
-said;
-at least;
-one;
-first instruction signal in;
-said;
-at least;
-one;
-second location.

Considering claim 123, no support is found for:
-The method of claim 122;
-wherein;
-said at least;

-said first instruction signal is embedded in;
-said;
-at least;
-one;
-second location before;
-said television signal is stored;
-wherein;
-said television programming;
-and;
-said at least;
-said first instruction signal;
-are stored concurrently on;
-said;
-one of;
-said;
-at least;
-one of;
-said tape;
-and;
-said disk.

Considering claim 124, no support is found for:
-The method of claim 121;
-wherein only;
-a portion of;
-an image portion of;
-said television programming prompts for;
-input of;
-said subscriber reaction;
-said image portion of;
-said television programming;
-being;
-within the range of;
-said television signal;
-that is displayed on;
-a normally tuned television picture set;
-said method;
-further comprising the steps of:
-selecting;

-at least;
-one;
-second location;
-to which;
-to communicate;
-said;
-at least;
-one;
-first instruction signal;
-said;
-at least;
-one;
-second location;
-being;
-within;
-said television signal but outside;
-said image portion;
-and;
-embedding;
-said;
-at least;
-one;
-first instruction signal in;
-said;
-at least;
-one;
-second location.

Considering claim 125, no support is found for:
-The method of claim 124;
-wherein;
-said;
-at least;
-one;
-first instruction signal is embedded in;
-said;
-at least;
-one;
-second location before;

-said television signal is stored;
-wherein;
-said television programming;
-and;
-said;
-at least;
-one;
-first instruction signal;
-are stored concurrently on;
-one of;
-said;
-at least;
-one of;
-said tape;
-and;
-said disk.

Considering claim 126, no support is found for:

-The method of claim 96;
-wherein;
-said selected;
-at least;
-one;
-time is before;
-said television signal is stored;
-wherein;
-said television programming;
-and;
-said;
-at least;
-one;
-first instruction signal;
-are stored concurrently at;
-said;
-at least;
-one;
-storage device.

Considering claim 127, no support is found for:

-The method of claim 126;
-wherein only;
-a portion of;
-an audible portion of;
-said television programming prompts for;
-input of;
-said subscriber reaction;
-said method;
-further comprising the steps of:
-selecting;
-a second location;
-to which;
-to communicate;
-said;
-at least;
-one;
-first instruction signal;
-said;
-at least;
-one;
-second location;
-being;
-within;
-said television signal but outside;
-said audible portion;
-and;
-embedding;
-said;
-at least;
-one;
-first instruction signal in;
-said;
-at least;
-one;
-second location.

Considering claim 128, no support is found for:
-The method of claim 127;
-wherein;

-said;
-at least;
-one;
-first instruction signal is embedded in;
-said;
-at least;
-one;
-second location before;
-said television signal is stored;
-wherein;
-said television programming;
-and;
-said;
-at least;
-one;
-first instruction signal;
-are stored concurrently at;
-said;
-at least;
-one;
-storage device.

Considering claim 129, no support is found for:
-The method of claim 126;
-wherein only;
-a portion of;
-an image portion of;
-said television programming prompts for;
-input of;
-said subscriber reaction;
-said image portion of;
-said television programming;
-being;
-within the range of;
-said television signal that is displayed on;
-a normally tuned television picture set;
-and;
-wherein;
-said selected;

-at least;
-one;
-first location is within;
-said television signal but outside;
-said image portion;
-said method;
-further comprising the steps of:
-embedding;
-said;
-at least;
-one;
-first instruction signal in;
-said selected;
-at least;
-one;
-first location.

Considering claim 130, no support is found for:
-The method of claim 129;
-wherein;
-said;
-at least;
-one;
-first instruction signal is embedded in;
-said selected;
-at least;
-one;
-first location before;
-said television signal is stored;
-wherein;
-said television programming;
-and;
-said;
-at least;
-one;
-first instruction signal;
-are stored at;
-said;
-at least;

-one;
-storage device.

Considering claim 130, no support is found for:
-131 The method of claim 96;
-wherein;
-said selected;
-at least;
-one;
-first location includes;
-a second location in;
-said television signal;
-and;
-said step of communicating;
-said;
-at least;
-one;
-first instruction signal further comprises the steps of:
-embedding at least;
-a portion of;
-said;
-at least;
-one;
-first instruction signal in;
-said second location in;
-said television signal.

Considering claim 132, no support is found for:
-The method of claim 131;
-wherein;
-said;
-at least;
-one;
-storage device includes;
-a plurality of storage locations;
-at least;
-a portion of;
-said television programming is communicated from;
-a first of;

-said plurality of storage locations;
-to;
-a second of;
-said plurality of storage locations;
-and;
-said step of storing further comprises the steps of:
-storing;
-said television signal;
-said television programming;
-and;
-said;
-at least;
-one;
-first instruction signal at;
-said second of;
-said plurality of storage locations concurrently.

Considering claim 133, no support is found for:
-The method of claim 132;
-wherein;
-said;
-at least;
-one;
-storage device includes;
-a plurality of storage devices;
-a first of;
-said plurality of storage devices contains;
-said first of;
-said plurality of storage locations;
-and;
-a second of;
-said plurality of storage devices contains;
-said second of;
-said plurality of storage locations.

Considering claim 134, no support is found for:
-The method of claim 133;
-further comprising the steps of:
-selecting;

-at least;
-one of;
-said plurality of storage devices.

Considering claim 135, no support is found for:
-The method of claim 132;
-wherein;
-said television signal;
-said television programming;
-and;
-said;
-at least;
-one;
-first instruction signal;
-are stored concurrently at;
-said first of;
-said plurality of storage locations.

Considering claim 136, no support is found for:
-The method of claim 132;
-wherein;
-said;
-at least;
-one;
-storage device further comprises;
-a network having;
-a plurality of stations;
-a first of;
-said plurality of stations;
-containing;
-said first of;
-said plurality of storage locations;
-and;
-a second of;
-said plurality of stations;
-containing;
-said second of;
-said plurality of storage locations.

Considering claim 137, no support is found for:
-The method of claim 136;
-wherein;
-at least;
-one of;
-said plurality of stations performs;
-said step of communicating;
-said;
-at least;
-one;
-first instruction signal based on;
-a schedule.

Considering claim 138, no support is found for:
-The method of claim 96;
-wherein;
-said television programming is of;
-a duration;
-wherein at least;
-a portion of;
-said duration includes;
-an offer of;
-at least;
-one of;
-a product;
-and;
-a service.

4. Pending claims of the group, 3-138, that are directed to ***digital*** related processes and apparatus, they are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Considering pending claims of the group 3-138, that are directed to ***digital*** related processes and apparatus, the group of pending claims is not found to be enabled in view of the discussion given below as to the level of skill of the ordinary artisan at the time the '87 C.I.P. disclosure was made. (As per an earlier agreement, copies of the "prior art" cited in this paragraph have not been provided with this Office action since such copies were previously provided in co-pending application S.N. 08/499,097).

I. Applicants have now presented claims which are directed to the distribution of, *inter alia*, of digital television signals, digital signals, and anything directed to derivatives of the term 'digital', as was allegedly described by applicants ***'87 C.I.P.*** disclosure. However, the following is noted:

As originally disclosed in the ***'87 C.I.P.***, it is apparent that applicants used the terminology, *inter alia*, "digital television signals" and "digital" to refer to television signals which represented conventional television programming and which comprised digitized audio and video signal components (see "Example #7" which begins of page 288 of instant disclosure). However, in the '87 C.I.P. disclosure as originally filed, applicants clearly lacked any specific description as to how:

a) the "digital television signals" of applicants' alleged invention(s) were to have been formatted for transmission over a television distribution system using the method(s) that are now recited in the pending claims; and

b) as to how the transmission circuitry of applicants' alleged invention(s) was modified and/or configured for the purpose of handling, *inter alia*, "digital television signals" in the matter that is now recited in the pending claims.

Apparent justification for the lack of such descriptions seems to be based on:

1) the allegation made by applicants' original '87 C.I.P. disclosure that "digital television signals" and like terms of the type described therein, were well known in the art at the time of applicants' alleged invention (note lines 30-33 on page 288 of applicants' disclosure), and;

2) on the apparent assumption that the "digital television signals" of applicants' disclosure could be handled/transmitted in a manner that was interchangeable with the handling and transmission, *inter alia*, of conventional analog television signals.[4] Hence and on the basis of these substantiated facts, Examiner legally concludes that such allegations and assumptions, made at the time of applicants' alleged invention, are respectively false and erroneous.

The examiner emphasizes that he does not dispute the fact that broadcasting digitally

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[4]For example, the original '87 C.I.P. disclosure described portions of applicants' alleged invention(s) as having operated to transmit digital television signals over a TV channel during a ***first period of time*** and as having transmitted analog television signals over said same channel during a ***subsequent period of time*** (see lines 1-5 on page 302 of applicants' instant disclosure). However, no discussion as to any difference in the handling of the two different television signals by the alleged invention(s) was ever provided, suggested, or recognized by applicants' original '87 C.I.P. disclosure).

formatted television signals was in fact well known to those skilled in the art at the time of applicants' alleged invention. Specifically, the examiner acknowledges that the transmission of digital television signals was known in the art when, under "rare" circumstances, a transmission channel of sufficient bandwidth was available. However, it is noted that the transmission of these conventional digital television signals was ***not*** interchangeable with the transmission of analog television signal as assumed by applicants' original '87 C.I.P. disclosure because of the extremely large bandwidth that was required to transmit conventional digital television signals; i.e. this was true even when the digital television signals had been ***compressed*** using state of the art bandwidth compression techniques **[1] [2] [3]**.

Given the above, the examiner maintains that the description found in applicants' original '87 C.I.P. disclosure pertaining to the transmission of "digital television signals" using applicants' alleged invention(s) was insufficient to have enabled the pending claims using the terminology. Specifically and based on these substantiated facts, it is legally concluded that applicants' original '87 C.I.P. disclosure at least failed to disclose and describe the manner in which the recited "digital television signals" had to have been formatted and processed so as to have enabled them to have been handled in the manner that was originally described in the '87 C.I.P.; e.g. the manner that now seems to be claimed.

In view of the above, applicants are hereby requested to submit evidence (e.g. a US

Patent or a printed publication) which support the allegations and assumptions on which applicants' original '87 C.I.P. disclosure was clearly based; i.e. references which show the means needed to format and transmit "digital television signals" in a manner required by applicants' disclosed/claimed invention(s) were in fact well known to those skilled in the art at the time of applicants' alleged invention.

II. The examiner notes that even those sections of applicants' original '87 C.I.P. disclosure which were directed to the transmission of, *inter alia*, "digital television signals", e.g. "Example #7" which begins on page 288 therein, provide few clues as to how the recited "digital television signals" and like terms were formatted, handled, and transmitted by applicants' alleged invention(s) in order to have enable them to have been processed in the manner that is now set forth in the pending claims. For example, the description of applicants' alleged invention(s) failed to explain:

1) how the "digital television signals", *inter alia,* of applicants' alleged invention(s) were formatted and/or compressed so as to have enabled them to have been handled, transmitted, and/or processed in the manner that is now recited in the pending claims;

2) how the "digital television signals", *inter alia*, of applicants' alleged invention(s) were formatted and/or compressed so that they could be transmitted over the same TV channel that was used to carry conventional analog TV broadcasts as originally disclosed (see lines 1-5 on page 302 of applicants' disclosure);

3) how the subscriber stations of applicants' alleged invention were modified in order to have handled/processed "digital television signals", *inter alia*, in the manner that is now claimed;

4) how the "SPAM" messages of subscriber stations were to have been embedded in the "digital television signals", how said "SPAM" messages were to have been carried by said digitally formatted television signals, and how said "SPAM" messages were to have been extracted from digitally formatted televisions signals;

5) how the bit-rate of the "SPAM" messages that were carried by said digital television signals was related to the bit-rate of the digital television signals into which they were embedded and how this bit rate related to the bit-rate of the "SPAM" signals that were carried in the analog television signals and how the disclosed/claimed system was configured to handle any such differences (e.g. while not addressed by applicants' original disclosure, it appears that the conventional differences between the bandwidth of digital television signals and analog television signals would translated into respective difference in the bit-rate of the "SPAM" messages that were embedded in respective ones of the two types of television signals).

III. On the basis of the substantiated facts set forth in parts **"I"** and **"II"** above, the Examiner legally concludes that the pending claims which are directed to the handling/transmission of "digital television signals" would have required ***undue*** experimentation by applicants' '87 C.I.P. disclosure because the allegations and assumptions, on which the disclosed handling and

transmission of such digital television signals was based, were respectively false and erroneous. The examiner legally concludes that these pending claims represent an ***invitation to experiment unduly***[5] when read in the context of the state of the "digital television signal", *inter alia*, transmission art which actually existed at the time of applicants' alleged invention; i.e. the technology required to have handled/transmitted "digital television signals" in the manner that was disclosed, and thus in the manner that is apparently claimed, does not appear to have existed at the time of applicants' alleged invention.

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[1] The publication "Digital Television Transmission With 34 Mbit/s" by Burkhardt et al. evidences a conventional transmission system in which a Television signal was broadcast in a digital format (see Figure 2). Even though the bandwidth of the digital television signal was compressed prior to transmission, said digital signal still required a 22 MHZ transmission channel (see the second paragraph under the heading "Bit-Rate Reduction" on page 244); i.e. wherein a bandwidth of 22 MHZ is almost 4X that of a standard 6 MHZ TV channel used for analog television signal transmission.

[2] The US Patent No. 3,755,624 to Sekimoto evidences a conventional system in which a television signal was digitally formatted and bandwidth compressed prior to broadcast. The

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[5]It is noted that because pending claims are not original, actually, **no experimentation is permitted** under Section 112's written description requirement.

resulting bit-rate of this compressed digital television signal was 32 Mbit/s which required a bandwidth more than 3X that of said standard 6 MHZ Tv channel.

[3] The US Patent No. 4,742,543 to Fredericksen illustrates a system in which a television signal was processed on the transmitter side of a broadcast system in a digital data format (see figure 1). However, prior to broadcast, Fredericksen converted the digital television signal back into an analog signal format (@33). Such D/A conversion was described as having been necessary because the standard analog TV channel that was used to transmit the television signal was ***not*** of sufficient bandwidth to carry the signal in it's digital format (note lines 18-23 of column 5). This provides further substantiated facts for why the conventional "digital television signals" could not have been handled in the manner described by applicants' as their alleged invention(s) without undue experimentation.

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5. Pending claims of the group, 3-138, that are directed to ***data*** (and terms derived from data, i.e. ***datum***, ***indicia***, etc.) related processes and apparatus, they are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

a) As originally described in the '87 C.I.P., applicants' written description described a method for formatting various types of digital control and display data segments called: "*SPAM Messages*". Once formatted, the "normal locations" of television and/or radio programming

were embedded within the *SPAM Messages* so as to have created a combined signal which was then transmitted through a 'conventional radio channel' or a 'conventional television channel' wherein the "normal location" was described as 'the vertical blanking interval' of a television video signal.

b) As also originally described in the '87 C.I.P, applicants' disclosure contained broad statements which suggested that said *SPAM messages* could be embedded within the "normal locations" of other types of programming besides radio and television programming. Specifically, the '87 C.I.P. also disclosed that the *SPAM messages* could be embedded within the "normal locations" of "other media" such as broadcast "**data**" or print (see the last line on instant page 35; lines 17-20 on instant page 71 and lines 7-9 on instant page 72). **However**, these statements are found to contradict the alleged invention as described by the later described so called "*more precise*" description (see lines 17-20 on instant page 72).

In the alleged "*more precise*"description, applicants explicitly taught that it was the "other media" which is embedded within the "information portion" of said SPAM messages. Hence the contradiction:

-first applicants teach that said SPAM messages are embedded within the "normal locations" of said "other media"; but later they teach

-it is the other media that is embedded within the information portions of said SPAM messages!

The disclosure, by these substantiated facts, *inter alia*, has caused examiner to legally conclude that the written description related to the term **"data"** and it's derivatives is so contradictory to the point that it would have required ***undue***[6] experimentation in order for the ordinary artisan to practice the alleged invention.

The examiner notes that the preceding discussion is supported by the fact that all concrete examples of system(s) and method(s) which were specifically illustrated in applicants' original disclosure were consistent only with said more precise teachings.

c) As is evidenced from parts **"a)"** and **"b)"** of this paragraph, applicants' original '87 C.I.P. disclosure did describe system(s) which formatted, transmitted, received, processed, and/or displayed radio and television *program units* under control of, and/or along with, embedded "SPAM messages". However, as evidenced in parts **"a)"** and **"b)"** of the above, applicants' disclosure did not describe system(s) and method(s) which formatted, transmitted, received, processed, and/or *displayed **"data"** program units under control of, and/or along with, associated* SPAM messages because *data program units* (i.e. as the terminology **"data"**, *inter alia*, was coined and used within applicants' written description) were actually transmitted with said SPAM messages. Specifically, the examiner maintains that said *"more precise"* teachings of applicants' own disclosure evidenced that the handling of the radio and television

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[6]As explained above, Section 112's written description requirement permits no experimentation even when less than undue when claims are not originally filed, as in the present case.

programming *program units* by the disclosed system(s)/method(s) was different from, and was non-analogous[7] with, the disclosed handling of *data* by the disclosed system(s)/method(s). More Specifically, said *more precise* teachings of applicants' original disclosure evidence the fact that only TV and radio programming was carried in the form of said described *program units*, while said "data" was carried as information packets located within said SPAM messages themselves (see part "b)" of this paragraph).

d) Given the substantiated facts set forth in **"a)", "b)", and "c)"** above, the examiner legally concludes that the recitations of pending claims using the term and it's derivatives would have required ***undue*** experimentation by applicants' '87 C.I.P. Specifically, the examiner finds the facts that applicants' disclosure at least failed to set forth the means and/or steps needed to make and use system(s)/method(s) in which recited **"data"**, *inter alia*, were formatted, transmitted, received, processed, and/or displayed in the manner which was explicitly disclosed/exemplified for television and radio *program units*. Specifically, in applicants' written description, the disclosed system(s) and method(s) for formatting, transmitting, received,

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[7] The examiner notes that if the disclosed SPAM signals were simply embedded within the digital data stream(s) of *other media*, as they were embedded within the television and radio programming, the ability of the disclosed "processors" to detect and synchronize themselves to the *SPAM signals* would be destroyed because the "cadence" used and required by the disclosed processors for synchronization purposes would no longer have existed; e.g. the start of a new *SPAM message* would ***not*** always have followed an "end-of-field" (EOF) signal as was required by processors in all of the embodiments of applicants' disclosure. However, it is noted that such a synchronization problem was clearly avoided when the other media was carried within the SPAM messages as appears to have actually been taught by the *more precise* teachings of applicants' disclosure (again, see lines 17-20 on page 72).

processing, and/or displaying said television and radio *program units* were incompatible with system(s) and method(s) which would have been needed to format, transmit, receive, process, and/or display *program units* comprised of **"data"**. Moreover, it is maintained that **"data"** (as coined and used within applicants' written description) could not be processed in the same manner that was described for television and radio programming program units as now appears to be claimed in the above enumerated pending claims.

6. Claims of the group 3-138, are rejected under 35 U.S.C. 112, first paragraph, because the **best mode** contemplated by the inventor has not been disclosed. Evidence of concealment of the best mode is based upon, *inter alia*: the ***nesting*** of detectors, signal processors, monitors, decryptors, decoders, buffers, controllers, computers, micro-computers.

Also for the apparent nesting of 'programming in data', and of 'data in programming', 'data being programming', and 'data not being programming', etc, what is programming, and what is not programming is not understood.

The '87 discloses is mis-leading and confusing. The ordinary artisan would ***not*** have understood terms, *inter alia*, was applicants best mode in view of the '87 disclosure ***alone***, i.e. the instant disclosure. It is concluded that the use of the omitted '81 disclosure to understand the instant disclosure is impermissible and falls subject to the ***insidious*** possibility circumventing Section 112. The ordinary artisan of '87 would have to understand what was set forth therein without the benefit of another document, i.e. '81. Moreover, the circular description for what is "data", "programming", for what "programming unit", "signal word", "data unit" would also

have caused the ordinary artisan so much trouble that the best mode would not have been recognized when considering the '87 disclosure ***alone***.

Notwithstanding, the description at pages 14-15 is so confusing as to what shall be the best mode for the pages 14-15 terms including, *inter alia*, **signal *word***, signal unit (reference discussion under objection to the specification above), ***etc***, that the best mode cannot be discerned for which shall be used.

Likewise, in '81 applicants describe their preferred mode to preclude headers; however, the '87 spec appears to use nothing but ***headers*** for the SPAM (reference discussion above), even though applicants appear to describe 'not using headers', once again, as their best mode in '87. It appears applicants have concealed the best mode for their data, *inter alia*, because even though they described the preferred mode as 'not using headers', they, in fact, failed to reveal how they actually accomplished, *inter alia*, their preferred mode.

The instant case is like In re Ruschig, 379 F.2d 990, 154 U.S.P.Q. 118 (C.C.P.A. 1967) where the judge's analysis is found to be appropriate to applicants' claims.

> It is an old custom in the woods to mark trails by making blaze marks on trees. It is no help in finding a trail or in finding one's way through the woods where the trails have disappeared-or have not yet been made, **which is more like the case here-to be confronted simply by a large number of unmarked trees**. Appellants are pointing to trees. **We are looking for blaze marks which single out particular trees. We see none**...Working backward from a knowledge of chlorpropamide, that is by hindsight, it is all very clear what route one would travel through the forest of the specification to arrive at it. **But looking at the problem, as we must, from the standpoint of one with no foreknowledge** of the specific compound, it is our considered opinion that the board was correct in saying:"Not having been specifically named or mentioned in any manner, one is left to selection from the myriads of possibilities

> encompassed by the broad disclosure, with no guide indicating or directing that this particular selection should be made rather than any of the many other which could also be made". (emphasis added).

Ruschig, 154 U.S.P.Q. at 122-123.

The '87 disclosure is analogous to the Ruschig woods. The Section 112 responses are pointing to applicants' woods in an analogous way that Ruschig appellants were "pointing to trees". Working backward from a knowledge later provided in Section 112 responses, there are some instances where limited support ***might*** exist. However, looking forward at the problem as the examiner ***must*** from the standpoint of no "foreknowledge", and hence without the Section 112 responses, the examiner cannot find the processes in the manner as they are now claimed.

Applicants' disclosure addresses a variety of claim limitations with varying degrees of specificity, and apparently describes contradictory processes and describes terms with contradictory description. The instant disclosure often reads. 'it might be this; but, 'it might be that'; but 'it might be neither'. It appears that what 'blazes' are available for approaching the problem without the benefit of later provided blaze marks, i.e., applicants' Section 112 responses, appear to lead the ordinary artisan right off the trail and into a thicket of bushes. Therefore, examiner recognizes insufficient blaze marks to motivate the assembly of pending claim limitations as they are now claimed.

Notwithstanding, the scattering of teachings across multiple applications in the chain of continuity, under the facts of the instant application, constitute either (**1**) an affirmative concealment of the best mode of carrying out applicants invention (Randomex, Inc. v. Scopus

Corp., 849, F.2d 585, 7 U.S.P.Q. 1050 (Fed. Cir.. 1988)), or (**2**) a total failure to be in possession at the time of filing of what is now claimed. Examiner finds (**2**) to ***at least*** be the instant case as explained above. However, *assuming arguendo* (**2**) is not the instant case, the following facts are substantiated for (**1**).

Considering pending claims of the group 3-138, *assuming arguendo,* that pending claims are supported 'through' the '87 disclosure so as to benefit from the '81 filing date even though applicants apparently have mistaken the '81 disclosure for the '87 disclosure. Moreover, *assuming arguendo*, that examiner has not mis-understood *the alleged pending claim* support, then the *alleged pending claim support* appears to have been hidden for reasons, *inter alia*, described above.

The very fact that applicants keep pointing to the parent '490 disclosure for demonstrating support to the instant disclosure in response to Section 112 rejections to the instant disclosure, ***is itself evidence of concealment***.

Examiner does not find sufficient blaze marks in the woods, ***he is lost***.

The *alleged pending claim support* tables are considered little to nothing more than attempts by to later provide what is ***missing*** from the '87 disclosure, even though it ***might*** have been present in '81.

However, examiner is prohibited, under Section 112's written description requirement, to use '81 for understanding '87, else Section 112 gets circumvented.

However, *assuming arguendo,* that the terms including, *inter alia*, 'data', 'digital', etc. can somehow meet **(2)**[8], questions are raised as to whether applicants disclosed their best mode. The meanings and concepts of the terms 'data', 'digital', 'programming', etc., appear to have been hidden. In any event, the terms clearly evolved, often ambiguously, so they would not be recognized to convey the same concept in '87 as they ***might*** have in '81.

In summary under best mode, few to no blaze marks were provided for adequately marking the path in '87, per Ruschig.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Pending claims of the group 3-138, are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

Considering pending claims of the group 3-138, as applicants have apparently mistaken the parent '490 disclosure for the instant disclosure, pending claims are rejected for failing to claim the invention.

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[8]Specifically, possession, Section 112's written description requirement.

9. Pending claims of the group 3-138 using the terms having different descriptions from '81 and '87, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

Considering claims of the group 3-138 using terms having different descriptions, from '87 and '81. For example, when the '87 description is different so as to contradict the '81, it appears that the claim gets benefit only with respect to '87 and the claim is constructed under the broadest reasonable interpretation standard with respect to '87 **only**. Likewise, when a term is elaborated upon and the claim modifies the term with '87 description, the term gets an '87 effective filing date.

However, it appears the Federal Circuit constructed the term 'information of a selected program unit' in claim 35 of '277, with respect to both descriptions in the '87 and the '81 specifications. See Personalized Media Communications, L.L.C. v. International Trade Commission et al, Appeal No. 97-1532 (decided January 7, 1999). While this might be appropriate when ***already*** a patent, and when Section 112 first paragraph was ***not*** in judicial review, the examiner maintains it is inappropriate ***before*** a patent in view of the *preponderance of the evidence test for patentability* under both the vague and indefinite prohibition of Section 112 second paragraph, and also Section 112 first paragraph. Hence, terms having different definitions from '87 to '81 are considered vague and indefinite, including the terms, *inter alia*,

'information', 'instruction', 'programming', 'program', 'data', 'digital', and derivatives of each term, etc. Applicants are respectfully requested to remove all claim terms from pending claims when their conceptual meanings are not identical for benefiting from '***81*** priority.

10. Pending claims of the group 3-138 using the terms, *inter alia*, 'program' and 'programming' derivatives thereof, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regards as the invention.

The examiner notes that the original '87 C.I.P. disclosure of the present application defines the terminology "programming" differently than the '81 disclosure. Specifically:

a) The Original disclosure of the present application explicitly defined the term "programming" to mean: "everything that is transmitted electronically to entertain, instruct, or inform including television, radio, broadcast print, and computer programming as well as combined medium programming" (see lines 5-8 on page 11 of the present written description); while in contrast

b) The '81 disclosure explicitly defined the same terminology to mean: "everything transmitted over television or radio intended for communication

of entertainment or to instruct or inform" (see lines 4-7 in the abstract of US patent 94,694,490).

I. With respect to the terms "program" and "programming" as recited in the pending claims:

A) As it relates to the broadcast and transmission art, the term "*program*" is defined by the Second College Edition of the 'American Heritage Dictionary" to mean: "a scheduled radio or television show". This conventional definition of the term "program" seems to be consistent with applicants' use of the terminology throughout the '81 disclosure. However, this conventional definition is clearly inconsistent with the definition given to the term "programming" via the original disclosure of the present application (see the preceding paragraph of this Office action).

B) While applicants may be their or her own lexicographer, a term in a claim may not be given a meaning is, *inter alia*, repugnant to the usual meaning of that term, In re Hill, 161 F.2d, 367,73. U.S.P.Q. 482 (C.C.P.A. 1947). The examiner maintains that the use of the terminology "programming" and "program" in pending claims (enumerated above) is repugnant to what was the normal/usual use of the terminology. Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

12. Claims 3-138, are rejected under 35 U.S.C. 102(a,b,e) as being clearly anticipated by patents '490 and '725.

Considering claims 3-138, applicants allege they are fully supported by the '81 disclosure. Examiner incorporates by reference, into this rejection, all previous responses to Section 112 rejections, noting that applicants have apparently mistaken the '81 disclosure for the instant disclosure.

Claim Rejections - 35 U.S.C. § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be

patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 3-138 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 89/02682.

Considering claims 3-138, to the extent that applicants can satisfy the enablement requirement of 112 1st but not the support requirement, a comparison has been made between a) the *alleged pending claim support* (Examiner incorporates by reference the *alleged pending claim support; see previous responses to Section 112 rejections*) and b) embodiments/processes taught in applicants' publication of March 23, 1989, by way of WO 89/02682. It is found, even if pending claims can be arrived at with less than undue experimentation, then it would most likely be from 'mixing and matching' the WO 89/02682 embodiments. And the ordinary artisan, to the extent that mixing and matching could have been done with undue experimentation, would have done so for the benefit of providing greater functionality to the subscriber.

15. Pending claims of the group, 3-138, that are directed to processes of controlling cable head end processes and monitoring of those processes and combined medium presentation, they are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenberg U.S. patent 4,547,804 ('804) in view of Galumbeck et al U.S. patent no. 4,725,886 ('886).

Considering pending claims of the group, 3-138, that cover, *inter alia*, processes of controlling CATV head end process and apparatus and monitoring of those processes and combined medium presentation are suggested by '804. '804, suggests the claims that cover method and apparatus for identifying and verifying the proper airing of television broadcast programs wherein the television broadcaster can be assured that the programs were televised and received and properly aired at the scheduled time. '804 teaches utilizing pre-recorded or line video programs in which imprinted on a pre-selected scanning line is a digital encoded identifying number. These video programs with digital encoding are then distributed to network and local broadcast stations to be televised with this identification. A plurality of selected aired television channels are then automatically simultaneously monitored at a typical reception site whereby the encoded broadcast is appraised as to the quality of its audio and video, identified and timed, and which information is then stored for a later comparison to that which was actually intended to be aired. The illustration and written description for Figure 2 suggests, *inter alia*, the identification signal generator

having all of memory means, detector means, video tape recorder, playback, and video tape recorder, and central computer, and processes thereof. The illustration and written description for Figure 2 suggests, *inter alia*, the broadcasting from the transmission station to the cable station and also suggests the monitor station and processes thereof. Notwithstanding, the switchable RF tuner, decoder, sequential storage, video channel switch, time generator, verification signal generator, and computer storage are suggested, *inter alia*, by Fig 3 and it's written description. Claimed subject matter directed to specific ***data*** and ***other*** programming sources, uses, and processes, that are not suggested by '804, are suggested by '886. For example, '886 suggests the claims that cover a communications system having an addressable receiver that is programmable, addressable, for receiving, storing, processing, and sending digital and conventional video audio and control signals for use in a cable video network. '886 suggests reception of audio and composite video and digital data received from various sources such as a satellite transponder and from local sources. The digital data may be processed into textual video data by character generation techniques, as may be other digital data received from a local keyboard, local weather sensors or ***other*** digital data interfaces. The receivers may be addressed in units or groups for purposes of receiving individually, locally or regionally tailored text information and are typically controlled simultaneously from one control source. The combination of '804 and '886, would have suggested the claimed invention to the

ordinary artisan so as to be obvious, as motivation, *inter alia,* is found for the purpose of fulfilling the needs of data consumers throughout a large geographic area, and to have continual, current local and national information.

16. Pending claims of the group 3-138, that are directed to, *inter alia,* processes of controlling broadcast subscriber stations, including decrypting, processing, storing, generation, and monitoring of those processes and combined medium presentation, are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffers et al (U.S. patent no. 4,739,510)('510).

Considering pending claims of the group, 3-138, that are directed to, *inter alia,* processes of controlling broadcast subscriber stations, including decrypting, processing, storing, generation, and monitoring of those processes and combined medium presentation, they cover what '510 suggests...broadcast programming including, *inter alia*, audio and control signals that are digitized and inserted into the horizontal blanking interval of distributed television programming. The control signal are in the form of a data stream which incudes a header containing group address, sync, and programming information for receiving units, and a portions addressable to contain information for control of particular individual receiving units in an addressed group. Information is in the addressable portions and can be altered on a real time basis so system operator has direct control over certain functions of

individual receiving units from the transmitting end. Figure 1 and it's written description disclosure, *inter alia*, a broadcast network having a computer, business center computer, voice response systems, monitor, controller, programming input, and video and audio channels to a program processing unit. There is disclosure of a satellite system, and a subscriber station having receiving apparatus and addressable decoding controller, and television display. Figure 2a,b and it's written description disclosure, *inter alia*, various processing circuitry and decryption circuitry for audio, memory, buffer, and related processes. Figure 3 and it's written description disclosure, *inter alia*, signal formatting with packets, headers, addressable bits, error correction bits, encryption, and ***other***. Figure 4 and it's written description disclosure, *inter alia*, more signal formatting including sync and address information, program related information, impulse pay per view, checksum, program cost, program time, programming tier authorization, unique identification of programming, and various group and system addressing and processes using the signaling. Figures 5,6a-b, and corresponding written description disclosure, *inter alia*, more signal formatting including message types having, authorization bit map, common audio key, home channel, as well as blocking bit map, call in time, telephone password, credit card password, overflow call in level, and also message time with subscriber addressing, and signature number used to select key fragments from subscriber signature key to decrypt, and encrypted message, and checksum. Figures 6c-e, and corresponding

written description disclosure, *inter alia*, message types 3-5, having call in telephone number, alternate call in telephone no, channel assignment tables for first 8 and second 8 channel respectively, and process related thereto. Figures 6f-g and corresponding written description disclosure, *inter alia*, signal format for message types 6-7, having direct control of segments, control and reset, audio threshold, data threshold, zip code blackout, mask blackout, trap message bit for peripheral interphase, and peripheral device signatures a-b respectively. Figure 7, and corresponding written description disclosure, *inter alia*, subscriber station process for channel selection, decrypting, processing, unit address mapping, and storing decrypted information Even though it appears, *inter alia*, that applicants may be reciting their claims so broadly that "local" generation of various programming can be combined with programming received from elsewhere to form a combined medium presentation for subsequent transmission to the subscriber station, examiner ***only*** finds support for the "local" generation to occur at the subscriber station and ***not a station intermediate***. However, to the extent that there is support for the former mentioned "local" generation, even though it is not found, it would have been obvious, *inter alia*, to provide the system operator with greater control of the network.

17. Pending claims of the group, 3-138, that are directed to, *inter alia*, processes of controlling affiliate stations and processes and monitoring of those processes and

combined medium presentation, they are rejected under 35 U.S.C. 103(a) as being unpatentable over Hazelwood et al (U.S. patent no. 4,025,851) ('851) in view of the publication "System and Apparatus for Automatic Monitoring Control of Broadcast Circuits" by Yamane et al, and the Australian Patent document No. 74,619 to Hetrich ('619).

Considering pending claims of the group 3-138, that are directed to, *inter alia,* processes of controlling cable head end processes and monitoring of those processes and combined medium presentation, '851 suggests the term 'processor' wherein the network station, the affiliate station, and the individual circuits which make up the network and affiliate stations, all function to process signals and hence are considered processors of a kind. '851, suggests television broadcast distribution processes and apparatus having a central broadcasting station represented by elements 10, 12, 14, and 22, and a network station including a source 10, of network television programming, wherein the network programming is distributed at 16 from the network station to a plurality of "local" affiliate television broadcast stations, and wherein the plurality of local affiliate broadcast stations receive, and selectively re-broadcast the network television programming wherein Figure 1 and it's written description discloses, *inter alia*, one of the suggested affiliate stations. Figure 3 and it's written description discloses, *inter alia*, structure of a typical broadcast distribution system having each of the plurality of affiliate stations of the distribution

system; and having, a source of local programming 44, which consists of different television signal sources including video tape recorders, wherein some of the video tape recorders function to record portions of the received network programming such that the record network programming could be played back and broadcast at some future time thereby imparting a predetermined time to delay the local re-broadcast of the network programming (see lines 29-39 of column 4). There is also disclosed, *inter alia*, a television program selector 16, which receives the locally produced programming from the local programming source 44, and which selectively outputs one of the two types of programming for broadcast and for re-broadcast via a predetermined television channel transmitter 42. As suggested, *inter alia*, the affiliate station structure operates by: receiving network television programming from the network station 16; producing local television programming via local programming source 44; selecting recorded portions of the received network television programming, via tap recorder located within the local programing source, wherein a delay is imparted to the network programming prior to being reproduced and transmitted as part of said locally produced television programming (see 44 as described, *inter alia*, in lines 28-33, of column 3); selecting one of the received network programming and the locally produced television programming for broadcast and for rebroadcast of the selected programming to a plurality of subscribers over the predetermined television channel 42. '851 discloses a modification to the typical

system with circuitry that enables a given network station of the system to monitor programming being broadcast and re-broadcast by the affiliate stations. '851 suggests, *inter alia*, enabling the network station to embed signals into the VBI of the network television programming that was being broadcast to the affiliate station referring to 12 and 14 of figure 1, so that the embedded codes (referring to figure 4) identify the programming being broadcast by title, source of origin, time of transmission (see, *inter alia,* lines 51-68 of column 5 and lines 1-5 of column 6). Moreover, '851 suggested, for accomplishing the monitoring, allowing each affiliate station to have contained means (i.e. computer system 30, 32, 34, and 36, of figure 3) for monitoring and "logging" the television programming being broadcast from the affiliate station via the detection and monitoring of said embedded codes. The computer system at each of the affiliate station is operable to report the results of the monitoring and logging process to a remote station location such as the network station (i.e. to the centrally located host computer system 38 of figure 3). '851 suggests the embedded monitoring ***instructions*** codes as encoded and distributed by the television distribution system. The codes represent additional information encoded then embedded within the network television programming so that they could be broadcast downstream to the affiliate stations and local TV receivers. Figure 1 and it's written description disclosure, *inter alia*, a transmitter station receiving mass medium television programming signal from a network programming signal source (e.g.

camera 10), wherein the mass medium programming signal, implicitly comprises audio (it's conventional). The figure 1 station, *inter alia*, receives instruction signals used for generating the monitoring codes which were generated at figure 1 12, e.g., wherein the generated monitoring codes (see figure 4) were then embedded into the mass medium programming via a summing circuit 14 of figure 1 for communication to the affiliate station (e.g. "Network outlets"). The network feed 16 of figure 1 corresponds to means for performing communication programming to a storage device in that the network feed communicates mass medium programming to the affiliate station where it is selectively received and recorded by a VTR (e.g. storage device), for delayed re-broadcast. The monitoring codes are embedded into the mass medium programming so as to have occurred during one ore more horizontal lines of the vertical blanking interval of the mass medium programming. At the encoder 12 of figure 1, has to have been controlled so as to communicate the monitoring codes to the summing circuit 14 at "selected" times in view that the monitoring codes were carried through the line at the selected time in which they were provided to summing circuit 14. The described VTR corresponding to various recited storage medium, stores the monitoring codes along with the mass medium programming and therefore comprises means for performing storing of programming signal and instruct signal at a storage device. Pending claims of the group, 3-138, that are directed to, *inter alia,* processes of controlling cable head end processes and monitoring of those processes

and combined medium presentation, not suggested by '851, are further suggested bu Yamane et al and '619. Yamane et al disclose a television broadcast system for embedding network monitoring codes within a given line of VBI of the broadcast "mass medium" programming. Yamane et al also disclosure, *inter alia*, embedding control signals into a second/different line of VBI of the television programing so as to provide additional control over the flow of the television programming through the downstream affiliate stations . '619 suggest a radio and television broadcast system in which control signals are embedded in the network radio/television programming for the purpose of controlling the flow of the radio/television programming through the plurality of affiliate stations. Hetrich discloses, *inter alia*, embedding control signals used for identifying the portions of the network programing which are to be recorded by the storage device of the affiliate stations for delayed re-broadcast. Because Yamane et al suggest that it is desirable to have monitoring codes and control codes within different scan lines of the same network television programming broadcast for providing respective control over monitoring and controlling functions of the television broadcast system; and because Yamane et al suggest implementing the circuitry needed to simultaneously encoded and embed two types of codes into the same TV broadcast (see figure 6.8 on page 71 of the translation), examiner concludes that it would have been obvious to have modified the encoder 12 of '851 to receive "control signals", e.g. in addition to "monitoring signals" already described by '851,

and to have simultaneously encoded and embedded and received control signals and received monitoring signals into the same network television signal via summing circuit 14, e.g. the embedding of the signals inherently takes place at selected times which are determined by the location of horizontal lines into which said encoded signals were embedded. Taken together, these monitoring signals, and control signals correspond to instruction signals. '619 suggest embedding control codes of the type found in the above described modified '851 system, for controlling and automating the recording of selected portions of received network programming at the affiliate stations. By controlling the affiliate stations to record the portions of network programming for delayed broadcast, the control codes are effective to instruct the affiliate station to delay the network programming for some selected period of time. Hence, in view of '851 disclosure, examiner concludes it would have been obvious to one skilled in the art to have used the control codes/signals in the modified system of '851 for controlling and hence automating the '851 disclosed means for recording of the selected portions of network television programming at the affiliate stations.

18. Pending claims of the group, 3-138, that are directed to, *inter alia*, processes of controlling subscriber station processes and monitoring of those processes and of combined medium presentation and processes, are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of the common subject matter suggested by

Campbell et al (WO81/02961, aban. Parent Appl. No. 135,987; U.S. patent 4,536,791))('791 is specifically referenced for convenience) in view of at least one or more of: Breeze "Television Line 21 Encoded Information And It's Impact on Receiver Station Design"; Schnee (U.S. patent no. 4,290,142) ('142); and Zaboklicki (DE 2,904,891)('891).

Regarding Campbell et al: the PCT publication date, noted on the front page of Campbell et al is October 15, 1981. For this reason, Campbell et al are considered a 102a reference. However, the effective priority of the material sourced for purposes of this rejection dates to the filing of the corresponding abandoned C.I.P. grant parent application no. 135,987, filed March 31, 1980. What was added in the C.I.P. of issue, is disclosure corresponding to Figures 2a, b, and 14-17 of the '791 patent. Because, the rejection herein relies on Fig's 1, 2, and 3-13, and corresponding written description and not Fig.'s 2a, b, and 14-17, the effective filing date of the teaching subject matter relied upon for this rejection in the '791 patent is March 31, 1980. A copy of the abandoned grand parent was provided in application 08/468,641.

Considering pending claims of the group, 3-138, that cover, *inter alia*, processes of controlling subscriber station processes and monitoring of those processes and of combined medium presentation and processes that are suggested by Campbell et al. Campbell et al suggest the claims that cover an addressable cable television control system controlling television program and data signal transmission

from the cable head end to the subscriber stations. The data signals include control and text embedded in the vertical blanking interval. There is also suggested full channel Teletext data in video line format which may be transmitted on dedicated text channels with the modification of only head end processors. There are intelligent converts at the subscriber locations for using the data signals to control access to the system on the basis of channel, tier, of service , special event and programming. The converter uses graphic display generator for generating display signals for the combined medium presentation of text data on the television receiver and for generation of predetermined messages for viewer concerned access, emergences, and other functions. The converter processes text data, and selected full channel text data transmitted in video line format. The keyboard of the subscriber provides different functional inputs for interfacing with the system. The converter is interactive two way for data acquisition and control. Figure 1 and it's written description suggest, *inter alia*, the central data control at cable head end, and the combination of control signals, instruction signals, audio programming, video programming. There is also disclosed addressable converter and at the subscriber station having input. Figure 2 and it's written description suggest, *inter alia,* formatting at the cable head end of data receiver from data sources, and various addressing control apparatus and processes. Figure 2a-b and corresponding written description disclose, *inter alia,* the packet length, and features of the video field line layout. Figure 3 and corresponding

written description disclose, *inter alia*, clocking control, local input, data storage, and floppy disk storage medium, printer, generation of control data, connection to remote control, and additional console inputs, and remote terminal and processes therefore. Figure 4 and corresponding written description disclose, *inter alia*, digital control and timing and processing and scrambling at the head end and processes thereof. Figure 6 and corresponding written description disclose, *inter alia*, various subscriber station method and apparatus for receiving programming, tuning programming, detecting programming, local inputting, descrambling and decrypting , memory, various input means, and various methods and processes therefore. Figure 7 and corresponding written description disclose, *inter alia*, the generation of graphics and video,, and memory means, and processor means, and processes thereof. Figure 8 and corresponding written description disclose, *inter alia*, level transition, analog comparator, and processes for vertical interval data extraction, and generation, and processing, for presenting. Figure 9-10 and corresponding written description disclose, *inter alia*, subscriber station head end converter and television, remote control, and security monitoring, and processes therefore. Figure 11 and corresponding written description disclose, *inter alia*, data structure, for control signals, and instruction signals, for control of the subscriber station and for control of processing and for control of monitoring, and for control of combined medium presentation. Figure 12 and corresponding written description disclose, *inter alia*,

processing and generation of combined medium presentation for audio, video, graphics, and subscriber input, descrambling, and processing. Claims that cover processes of controlling subscriber station processes and monitoring of those processes and of combined medium presentation and processes that are not suggested by Campbell et al are suggested by Breeze. For example, Breeze suggests a system for transmission of accurate time information during the vertical interval and of standard television broadcasts. The disclosure suggests implementation of digital tuning, test signaling, facsimile, and other uses for transmission of digital encoding. Figure 1 and it's written description disclose, *inter alia*, generation of timing information. Figure 2 and it's written description disclose, *inter alia,* code format having bits for identifying information type to follow, such as time, and text, and bits containing time data, and channel codes. Figure 4 and it's written description disclose, *inter alia,* process and method for detecting codes and decoding various signaling. Figure 5 and it's written description disclose, *inter alia,* process and method for numeric generation of time and channel display. Figures 6-7 and written description disclose, *inter alia,* process and method for timing utilizing encoded channel identification. Figure 8 and it's written description disclose, *inter alia,* process and method for digital channel comparison and storing, and the column prior to the conclusion suggests automatic programming and automatic tuning. Claims that cover processes of controlling subscriber station processes and monitoring of those

processes and of combined medium presentation and processes that are not suggested by Campbell et al and are not suggested by Breeze, are suggested by '142. For example Schnee suggests, *inter alia*, an interactive cable television system having combined medium presentation of data, audio, and video, which has been transmitted on different channels of time, space, and frequency (see second to last paragraph). '142 suggests combined medium presentation of a locally generated image with video. There is also suggested a combined medium presentation of data and video. And there is also suggested combined medium presentation of radio and television. Claims that cover processes of controlling subscriber station processes and monitoring of those processes and of combined medium presentation and processes that are not suggested by Campbell et al and are not suggested by Breeze, are not suggested by '142, are suggested by '891. For example, '891 suggests, inter alia, the combined medium presentation and processing therefore, including the display of portions of graphic presentation. Pending claims therefore covering combined medium presentation of data and video would have been obvious, *inter alia*, for providing cable subscribers with enhanced interactive processes including enhancing conventional entertainment, providing useful information, and offering greater control to the cable head end operators.

19. Pending claims of the group, 3-138, that are directed to, *inter alia*, either processes of controlling ***affiliate*** stations and processes and monitoring of those processes and combined medium presentation or processes of controlling ***subscriber*** stations and method and process for monitoring and providing combined medium presentations, or both, that fall out each particular determined group members of the group of claims described in rejection above, the groups are ***provisionally*** rejected further in view of one or more of:

-Hazelwood et al (US. Patent No. 4,025,851);(see reasoning and level of skill at '81 as discussed in rejection below and above);

-The publication "System and Apparatus for Automatic Monitoring Control of Broadcast Circuits" by Yamane et al;(see reasoning and level of skill at '81 as discussed in rejection below and above);

-Australian Patent document No. 74,619 to Hetrich;(see reasoning and level of skill at '81 as discussed in rejection below and above);

-"A Public Broadcaster's View of Teletext in the United States", Gunn; (see discussion and reasoning given below);

-Master Control Techniques" by Marsden vol 9 of the "Journal of the Television Society", '59; (see reasoning and level of skill at '81 as discussed in rejection below and above);

-"The Automation of Small Television Stations" by Young et al vol 80 of the "Journal of the SMPTE", Oct. '71; (see reasoning and level of skill at '81 as discussed in rejection below and above);

-U.S. Patent 3,761,888 to Flynn;(see reasoning and level of skill at '81 as discussed in rejection below);

-U.S. Patent 3,627,914 to Davis;(see reasoning and level of skill at '81 as discussed in rejection below);

-"Microprocessor For CATV Systems" by Tunmann et al;;(see reasoning and level of skill at '81 as discussed in rejection below);

-U.K. Patent 959,374 to Germany;(see reasoning and level of skill at '81 as discussed in rejection below);

-"Automatic Control of Video Tape Equipment at NBC, Burbank", by Byloff, '59; (see reasoning and level of skill at '81 as discussed in rejection below);

-"Video Banks Automate Delayed Satellite Programming", by Chiddix, '78;(see rejections below);

-"The Digitrol 2 ~ Automatic VTR Programme Control", by Skilton, pages 60-61, of -"International Broadcast Engineer", 3/81;(see reasoning and level of skill at '81 as discussed in rejection below);

-CATV Program Origination and Production, by Schiller et al, '79 (see 892);

(this reference merely sets forth, *inter alia,* in one place and in laymen terms,

what the level of skill in the art rejection above does in technical terms; so to the extent the above/below rejection is too technical with respect to level of skill in the art at '79, the level is described herein in laymen terms for purpose of clarity);

-Television Production Handbook, by Zettl, Second Edition, '69; (see reasoning and level of skill at '81 as discussed in rejection below);

-Vikene, WO 80/02093; (Vikene suggests, *inter alia,* a method of transmitting from a broadcaster in addition to the information signal remote control signals, in order to on the receiving side, corresponding to announced programs from the broadcaster which are provided with coded markings, to effect recording of the information on a tape or video recorder. Which markings are also recorded and the recorder is programmable in accordance with the announced programs, so as to be reproduced at a desired time using the recorded markings and the program set in the recorder to sort out the desired information and standard stop the recorder; hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Vikene disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained in the recording of the information on a tape or video recorder);

-Greenberg U.S. patent 4,547,804;(see rejections above considering the benefit of greater network operator control);

-Jeffers et al U.S. patent 4,739,510;(see rejections above considering the benefit of the ability to, *inter alia*, decrypt and hence secure programming);

-"Electronic Image and Tone Return Equipment With Switching System and Remote Control Receiver for Television Decoder" by Werner Diederich DT 23 56 969 A1; (Diederich suggests, *inter alia,* an electronic image and tone return equipment with switching system and remote control receiver for television decoder. hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Diederich disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-Campbell et al WO81/02961; to the extent that the above and below do not address this group of claims and to the extent that Campbell et al do (see above), it would have been obvious for the benefits described above including, *inter alia*, enhanced subscriber station services);

-Campbell et al Aban. Parent Appl. No. 135,987; (same as WO81/02961);

-Campbell et al U.S. patent 4,536,791('791); (same as WO81/02961);

-"Automatic Storage and Retrieval of Videotaped Programs", by Kazama et al, 4/79;(Kazama et al suggests, *inter alia,* a fully automatic storage receive of Videotaped Programs that is computer controlled, so as to constitute tape-traffic and handling system. hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Kazama et al disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-"Code accompanying TV program turns on video cassette recorder in proposed scheme", by J Gosch, vol 54 no. 3, February 10, 1981; (Gosch teach, *inter alia,* code accompanying TV programming for turning on a video cassette recorder for delayed or altered schedule programming; as well as for unscheduled broadcasts and for alerting emergencies and providing updates. Hence, to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Gosch disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-"An Automated Programming Control System For Cable TV", by Stern (80); (Stern suggests, *inter alia*, an automated programming control system for Cable TV having a machine control interface unit containing special circuits

for sensing control track pulses, so the system can accurately search for different program material and commercials recorded on one tape; also there is suggested pre-roll of a tape to a specific program; and rewind to a previous segment...so as to "essentially" be "random-access" to the contents of the video tape, under full system control. Hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Stern disclosure, it would have been obvious to one having ordinary skill in the art for the convenience);

-"Television Line 21 Encoded Information and It's Impact on Receiver Design", Breeze, Nov. '72; (see rejection above. Hence, to the extent that the above and below discussions do not suggest the particular determined group members of the group of claims, and to the extent that it is met by Breeze (see above) it would have been obvious for the convenience gained);

-"Automatic Switching in the CBC - An Update" by M.W.S. Barlow (Sept. 76); (suggests, *inter alia*, ***network controlled*** automatic switching process. Hence, to the extent that the above and below discussions do not suggest the particular determined group members of the group of claims, and to the extent that it is met by the Barlow disclosure, it would have been obvious for the convenience gained);

-"Transmission no Alphanumeric Data by Television", by Millar et al 1 370 535, GB-1974-10; (see discussion and reasoning below);

-Galumbeck et al (U.S. patent no. 4,725,886); (to the extent that the above and below discussion does not suggest the particular determined group members of the group of claims, and to the extent that the difference is met by Galumbeck et al, it would have been obvious for the convenience gained);

-CBS/CCETT North American Broadcast Teletext Specification, 5/81; (suggests, *inter alia*, captioning transmitted to a decoder for superimposing over the program video at a pre-designated time, and selecting a classification of captions so as to be displayed over program video. Hence, to the extent that the above and below do not suggest the particular group of claims and to the extent it is met by the CBS/CCETT disclosure, it would have been obvious for the convenience gained);

-Zaboklicki (DE 2,904,891); (to the extent that the discussion above and bellow does not suggest the particular determined group members of the group of claims, and to the extent it is met bo Zabolicki, it would have been obvious for the benefit of the convenience gained);

-Nagel (U.S. patent no. 4,064,490); (suggests, *inter alia*, methods and apparatus for the reception, and processing of computer applications. Hence to the extent the above and below discussions do not address the particular

determined group members of the group of claims, and to the extent the difference is met with the above Zaboklicki disclosure, it would have been obvious for the benefit of the convenience gained);

-Kakihara et al (U.S. patent no. 4,251,691);(suggests, *inter alia*, a center-to-end type information service system utilizing the public telephone networks that are fundamental communication media of nation-wide scale in which desired information is requested from the terminal side to the center by means of a telephone set of keyboard and then delivered to and received by a TV receiver, wherein a part of the center functions is transferred together with the exchange function to a subscriber located near the terminal so that the length transmission path connecting the center to terminals becomes shorter and the cost of the whole system can be reduced. Hence, to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Kakihara disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-Hedger et al (Telesoftware-Value Added Teletext); (suggests, *inter alia*, broadcast software and subscriber station computing apparatus having input and output device for interactive user applications. Hence, to the extent the above and below discussions do not address the particular determined group

members of the group of claims, and to the extent the difference is met with the above Kakihara disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-"The Vertical Interval: A General-Purpose Transmission Path", Ted V. Anderson; (See discussion and reasoning below);

"A Public Broadcaster's View of Teletext in the United States", Gunn; (see discussion and reasoning given below);

-"Automatic Program Recording System, Gaucher, '75; (suggests, *inter alia*, an automatic program recording system. Hence, to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Gaucher disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-U.S. patent 4,290,142, to Schnee et al (to the extent that the above and below discussion does not suggests the particular determined group members of the group of claims, and to the extent that Schnee et al do, it would have been obvious for the benefit of the convenience gained).

For example, to the extent that pending claims of the group, 3-138, that are directed to, *inter alia,* processes of controlling cable head end processes and

monitoring of those processes and combined medium presentation, and controlling subscriber station processes and monitoring of those processes, and for combined medium presentation, are not suggested by the above, they cover subject matter known as the *'81 level of skill in the art* (11/3/81) so that the combination would be obvious for implementing, *inter alia*, what was well known for the benefit of increasing network automation and hence provide the network control with more efficient means with which to operate and control said network. The following discussion is provided to establish the **'level of skill in the art'** which existed at the time of applicants' alleged invention ('81), such skill level sets forth the context in which the applied art of record must be reviewed:

1. The examiner notes that local television broadcast stations, which only served small regional areas of a country (e.g. the USA), often lacked the financial resources required to create enough original television programing to fill their daily broadcast schedules. Thus, these local television stations became *"affiliates"* of a national television broadcast network (e.g. NBC, ABC, CBS, etc,...) whereby the national television network created original network television programming which could be transmitted to, and commonly rebroadcast by, all of the local affiliate stations. This arrangement allowed the cost of creating such original programming to be divided

amongst the affiliate stations thereby reducing the cost to any one of the affiliates.[9]

2. While, in practice, it was feasible to fill the affiliate stations' entire local broadcast schedules with network programming, such was known not to have been desirable. Specifically, there still remained a need to supplement said network programming with locally originated programming tailored specifically to the needs and interests of the local audiences (e.g. local news programs, local commercials, etc,...).[10]

3. To accomplish the above, an arrangement was established in which a national broadcast station would broadcast network programming to all of it's affiliate stations in accordance with a strict network broadcast schedule. This strict network broadcast schedule

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[9]See, the first 23 lines In the full paragraph on page 85 of the article "Master Control Techniques" by Marsden which was published in volume 9 of the "Journal of the Television Society" in 1959.

[10] Note the first 23 lines in the second full paragraph of page 85 of the article "Master Control Techniques" by Marsden which was published in volume 9 of the "Journal of the Television Society" in 1959.

Note: lines 2-9 in the second column on page 806 of the article "The Automation Of Small Television Stations" by Young et al which was published in volume 80 of the "Journal of the SMPTE" in October of 1971.

included scheduled "breaks" in the network programming which were then made available to the local affiliate stations for the purpose of inserting locally originated programming.[11] This locally originated programming was known to have included previously broadcast network programming which had been recorded for delayed rebroadcast.[12] The resulting combined programming was then broadcast to the local audiences of the affiliate stations.

4. Early on, the local affiliate stations produced and inserted their own local programming into the network programming via a switching network which was controlled manually by local technicians. However, as technology progressed, methods for automating various aspects of the program insertion/switching process developed Such developments included:

1) The development of automatic scheduling computers which could be programmed to execute a list of scheduled programming events

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[11] Note the last 11 lines on page 810 of the article ... "The Automation Of Small Television Stations" by Young et al, which was published in volume 80 of the "Journal of the SMPTE" on October of 1971.

[12] See lines 25-41 in column 4 of U.S. Patent 4,025,851 to Hazelwood et al. which was published on May 24, 1977.

whereby the list of events automatically controlled tile sequence in which scheduled programming was produced and broadcast from a respective broadcast. Such computers were used to automate both the network television stations and affiliate television stations .[13]

2) The development of automated program cuing systems which include: equipment located at the national network for embedding cuing signals into the broadcasted network programming whereby said cuing signals identified the beginning and the end of each scheduled "break" in network programming, and equipment located at the affiliate stations which used the embedded cuing stations to determined the respective beginning and the respective end of each scheduled network "break" and, based on this determination,

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[13] Note: the last 11 lines on page 810 of the article "The Automation Of Small Television Stations" by Young et al. which was published in volume 80 of the "Journal of the SMPTE" in October of 1971.
Note: U.S. Patent # 3,761,888 to Flynn which was published on 9/25/73.
Note: U.S. Patent # 3,627,914 to Davies which was published on 12/14/71.
Note: the publication "Microprocessor For CATV Systems" by Tunmann et al. Which was Published by the Tele-Engineering Corp on 4/30/1978.

automatically cause its own scheduled local programming to be inserted into said "breaks" prior to "re-broadcast".[14]

5. Because ones of the affiliate stations were located in different time zones, equipment was required to compensate the broadcasted network programming for these tine zone differences, i.e. if the same network programming was to have been broadcasted at the same local time throughout the entire country. This compensation was accomplished by delaying the broadcasted network programming which was provided to a given one of the affiliate stations, via a network of recording devices, as a function of the time zone in which the given affiliate station was located. Early on, due to the high cost of this delay equipment, compensation was provided only at the central network station.[15] But subsequently, as the cost of the delay equipment came down and as the use of highly expensive satellite transmission

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[14] See: Australian Patent Document S.N. 074,619 by Hetrich which was published April 29, 1976.

See: U.K. Patent Document S.N. 959,374 by Germany which was published May 27, 1964.

[15] Note the article "Automatic Control of Video Tape Equipment at NBC, Burbank" by Byloff which was published by the National Broadcasting Company, Inc. in 1959.

paths increased, said delay equipment began be located within ones of the affiliate station locations.[16] In either of these situations, when network programming was to be delayed in this manner, it was understood that any "program related data" that was carried with the network programming (e.g. such as the network cueing signals, network program monitoring codes; etc,...) also had to be delayed by the delay equipment in order to have maintained the precise timing relationship of such program related data with the said network programming.[17]

Moreover, consider the state of television before the parent '81 disclosure...

The following discussion has been provided to emphasize the state of the television/radio broadcast art which existed at the time of applicants' alleged

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[16]See: the publication "Video Banks Automated Delayed Satellite Programming" by Chiddix which was published in 1978.

See: the publication "The Digitrol 2 ~ Automatic VTR Programme Control" by Skilton which was published on pages 60-61 of the "International Broadcast Engineer" in March of 1981.

Note: lines 25-41 in column 4 of U.S. Patent 4,025,851 to Hazelwood et al. which was published on May 24, 1977.

[17]See: the first 7 lines in the first full paragraph of the third column on page 39 of the publication "Video Banks Automate Delayed Satellite Programming" by Chiddix which was published in 1978.

Note: U.S. Patent 4,025,851 to Hazelwood et al. Which was published on May 24, 1977.

invention and, therefore, to further exemplify the context in which the applied prior art of record must be viewed. Support for this discussion is derived from the following prior art: 1) the publication "System and Apparatus for Automatic Monitoring Control of Broadcast Circuits" by Yamane et al; 2) the Australian Patent document No. 74, 619 to Hetrich; 3) the publication "The Vertical Interval: A General-Purpose Transmission Path" by Anderson; and 4) the British patent document No. 959,274 to Germany.

A) Contrary to the arguments presented by applicants in co-pending applications (e.g.S.N. 113,329)[18], it is maintained that the body of art pertaining to the broadcast of television programming the body of art pertaining to the broadcast of radio programming were, and still are, analogous arts. To suggest otherwise is to portray an unrealistically low level of skill in the art. The following fats provide evidence as to the analogous nature of these two arts:

1. First, it is noted that radio programming and television programming were communicated through radio and television distribution networks in the same basic way/format. More specifically, both radio/television distribution networks

[18]The Examiner notes that application S.N. 113,329 has already been cited in the record and therefore its citation by Examiner herein is not prohibited.

operated to produce, sequence and distribute radio/television programming to a plurality of household `radio/television receivers based on predetermined radio/television broadcast schedules. In fact, the definition of the word program, as it pertains to the broadcast environment, was/is: "a scheduled radio or television show".

2 By the fact that the actual configurations of the radio and television networks themselves mirrored each other element for element. For example, both systems comprised national/network stations and affiliated local/regional stations wherein the local/regional stations operated to selectively rebroadcast network programming, or to broadcast locally produced programming in place of the network programming, to said household receivers. Almost the only difference between the configurations of the radio and television networks was that the circuitry needed to implement the television network was of a greater bandwidth than that of the radio network (e.g. the television network used VTRs in places where the radio network used ATRs);

3. By the fact that the prior art of record shows that, at the time of Applicants' alleged invention, those of ordinary skill in the art themselves understood radio/television distribution networks to be "analogous arts". For example, this fact is clearly reflected in the teaching of Hetrich that his disclosed control signal distribution circuitry, while described in detail with respect to radio broadcast networks, could likewise have been used within television broadcast networks (see: the first 4 lines on page 2 of the Hetrich document).

B) Television and radio broadcast networks, which comprised a plurality of local/regional broadcast stations affiliated with a respective central/national broadcast station, were notoriously well known in the art at the time of applicants' alleged invention. The central/national broadcast station of these broadcast networks operated to create national television/radio programming and to broadcast said created programming to ones of its affiliate broadcast stations. Said ones of the affiliate stations received the broadcasted network television/radio programming and then either rebroadcast said received network programming or broadcast locally produced commercials/programs in place of said received network programming. The programming that was

broadcast from the ones of the affiliate stations were received by a plurality of television receivers located at the households within the local region served by the affiliates, and/or were received and processed by additional ones of said affiliate stations.

C) In order to 1) reduce the operating costs of said television and radio broadcast networks, 2) eliminate man made errors in said television and radio networks; and 3) increase the efficiency in flow of programming in said television and radio networks (i.e. the "motion functions"), it became a desirable trend in the television/radio broadcast industries to have "automated" as much of the broadcast network process as was economically beneficial; e.g. where the term "automated" referred to the unmanned operation of network processes by machines instead of station personal (note lines 7-22 on page 5 of the Yamane et al translation). Early on, the process that was targeted for automation involved: the monitoring of broadcast programming for the purpose of determining faults/failures in the network; the monitoring of broadcasted programming for the purpose of determining subsequent program switching opportunities; the control of program flow and switching according to "confirmed program schedules"; etc, ... (note lines 9-18 on page 6 of Yamane et al translation).

D)One notoriously well known way of automating many of the processes performed by television/radio networks, was through the use of embedded "identification information signals" and "control information signals" within the broadcast network programming such that said embedded signals were used to monitor and identify the network programming being broadcast and were used to provide control over program switching operations of said affiliate stations (note lines 1-6 on page 2 of the Yamane et al translation; lines 11-27 on page 13 and lines 1-21 on page 14 of the Yamane et al translation; lines 16-23 on page 15 of the Yamane et al translation; the last six lines on page 18 of the Yamane et al translation; figure 1 of Hetrich; lines 1-10 on page 2 of Hetrich; the last 9 lines on page 10 of Hetrich; the abstract on page 77 of Anderson; and the first full paragraph under the heading "Introduction" on page 77 of Anderson). It is noted that at least the publication of Anderson recognized the fact that the versatility of this type of system automation could be greatly expanded if the embedded signals were capable of being addressed to a specific ones, and/or to specific ones, of the affiliate stations (note: the first three lines under the heading "Applications" on page 80 of Anderson; and lines 1-12 under the heading "Conclusion" on page 82 of Anderson).

Double Patenting

20. Conflicts exist between claims of the following related co-pending applications which includes the present application:

#	Ser. No.	#	Ser. No.	#Ser. No.	
1	397371	2	397582	3	397636
4	435757	5	435758	6	437044
7	437045	8	437629	9	437635
10	437791	11	437819	12	437864
13	437887	14	437937	15	438011
16	438206	17	438216	18	438659
19	439668	20	439670	21	440657
22	440837	23	441027	24	441033
25	441575	26	441577	27	441701
28	441749	29	441821	30	441880
31	441942	32	441996	33	442165
34	442327	35	442335	36	442369
37	442383	38	442505	39	442507
40	444643	41	444756	42	444757
43	444758	44	444781	45	444786
46	444787	47	444788	48	444887

49	445045	50	445054	51	445290
52	445294	53	445296	54	445328
55	446123	56	446124	57	446429
58	446430	59	446431	60	446432
61	446494	62	446553	63	446579
64	447380	65	447414	66	447415
67	447416	68	447446	69	447447
70	447448	71	447449	72	447496
73	447502	74	447529	75	447611
76	447621	77	447679	78	447711
79	447712	80	447724	81	447726
82	447826	83	447908	84	447938
85	447974	86	447977	87	448099
88	448116	89	448141	90	448143
91	448175	92	448251	93	448309
94	448326	95	448643	96	448644
97	448662	98	448667	99	448794
100	448810	101	448833	102	448915
103	448916	104	448917	105	448976
106	448977	107	448978	108	448979

109	449097	110	449110	111	449248
112	449263	113	449281	114	449291
115	449302	116	449351	117	449369
118	449411	119	449413	120	449523
121	449530	122	449531	123	449532
124	449652	125	449697	126	449702
127	449717	128	449718	129	449798
130	449800	131	449829	132	449867
133	449901	134	450680	135	451203
136	451377	137	451496	138	451746
139	452395	140	458566	141	458699
142	458760	143	459216	144	459217
145	459218	146	459506	147	459507
148	459521	149	459522	150	459788
151	460043	152	460081	153	460085
154	460120	155	460187	156	460240
157	460256	158	460274	159	460387
160	460394	161	460401	162	460556
163	460557	164	460591	165	460592
166	460634	167	460642	168	460668

169	460677	170	460711	171	460713
172	460743	173	460765	174	460766
175	460770	176	460793	177	460817
178	466887	179	466888	180	466890
181	466894	182	467045	183	467904
184	468044	185	468323	186	468324
187	468641	188	468736	189	468994
190	469056	191	469059	192	469078
193	469103	194	469106	195	469107
196	469108	197	469109	198	469355
199	469496	200	469517	201	469612
202	469623	203	469624	204	469626
205	470051	206	470052	207	470053
208	470054	209	470236	210	470447
211	470448	212	470476	213	470570
214	470571	215	471024	216	471191
217	471238	218	471239	219	471240
220	472066	221	472399	222	472462
223	472980	224	473213	225	473224
226	473484	227	473927	228	473996

229	473997	230	473998	231	473999
232	474119	233	474139	234	474145
235	474146	236	474147	237	474496
238	474674	239	474963	240	474964
241	475341	242	475342	243	477547
244	477564	245	477570	246	477660
247	477711	248	477712	249	477805
250	477955	251	478044	252	478107
253	478544	254	478633	255	478767
256	478794	257	478858	258	478864
259	478908	260	479042	261	479215
262	479216	263	479217	264	479374
265	479375	266	479414	267	479523
268	479524	269	479667	270	480059
271	480060	272	480383	273	480392
274	480740	275	481074	276	482573
277	482574	278	482857	279	483054
280	483169	281	483174	282	483269
283	483980	284	484275	285	484276
286	484858	287	484865	288	485282

289	485283	290	485507	291	485775
292	486258	293	486259	294	486265
295	486266	296	486297	297	487155
298	487397	299	487408	300	487410
301	487411	302	487428	303	487506
304	487516	305	487526	306	487536
307	487546	308	487556	309	487565
310	487649	311	487851	312	487895
313	487980	314	487981	315	487982
316	487984	317	488032	318	488058
319	488378	320	488383	321	488436
322	488438	323	488439	324	488619
325	488620	326	498002	327	511491
328	485773	329	113329		

21. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application.The ***formerly*** attached Appendix provides clear evidence that such conflicting claims exist between the 329 related co-pending applications identified above.However, an analysis of all claims in the 329 related co-pending applications would be an extreme burden on the Office requiring millions of claim comparisons.

In order to resolve the conflict between applications, applicant is required to either:

(1) file terminal disclaimers in each of the related 329 applications terminally disclaiming each of the other 329 applications, or;

(2) provide an affidavit attesting to the fact that all claims in the 329 applications have been reviewed by applicant and that no conflicting claims exists between the applications.Applicant should provide all relevant factual information including the specific steps taken to insure that no conflicting claims exist between the applications, or;

(3) resolve all conflicts between claims in the above identified 329 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 329 applications (note: the five examples in the ***formerly*** attached **Appendix** are merely illustrative of the overall problem.Only correcting the five identified conflicts would not satisfy the requirement).

22. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).In re Schneller, 397 F.2d 350, 158 U.S.P.Q. 210 (C.C.P.A. 1968).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

23. All pending claims are rejected under the judicially created doctrine of

obviousness-type double patenting as being unpatentable over at least one or more of:

U.S. Patent No. 4,694,490 ('490);

U.S. patent no. 4,704,725 ('725);

U.S. Patent No. 4,965,825 ('825);

U.S. patent no. 5,109,414 ('414),

U.S. patent no. 5,233,654 ('654),

U.S. patent no. 5,335,277 ('277);

in view of at least one or more of:

-Hazelwood et al (US. Patent No. 4,025,851);(see reasoning and level of skill at '81 as discussed in rejection below and above);

-The publication "System and Apparatus for Automatic Monitoring Control of Broadcast Circuits" by Yamane et al;(see reasoning and level of skill at '81 as discussed in rejection below and above);

-Australian Patent document No. 74,619 to Hetrich;(see reasoning and level of skill at '81 as discussed in rejection below and above;

-"A Public Broadcaster's View of Teletext in the United States", Gunn; (see discussion and reasoning given below);

-Master Control Techniques" by Marsden vol 9 of the "Journal of the Television Society", '59; (see reasoning and level of skill at '81 as discussed in rejection below and above);

-"The Automation of Small Television Stations" by Young et al vol 80 of the "Journal of the SMPTE", Oct. '71; (see reasoning and level of skill at '81 as discussed in rejection below and above);

-U.S. Patent 3,761,888 to Flynn;(see reasoning and level of skill at '81 as discussed in rejection below);

-U.S. Patent 3,627,914 to Davis;(see reasoning and level of skill at '81 as discussed in rejection below);

-"Microprocessor For CATV Systems" by Tunmann et al;;(see reasoning and level of skill at '81 as discussed in rejection below);

-U.K. Patent 959,374 to Germany;(see reasoning and level of skill at '81 as discussed in rejection below);

-"Automatic Control of Video Tape Equipment at NBC, Burbank", by Byloff, '59; (see reasoning and level of skill at '81 as discussed in rejection below);

-"Video Banks Automate Delayed Satellite Programming", by Chiddix, '78;(see rejections below);

-"The Digitrol 2 ~ Automatic VTR Programme Control", by Skilton, pages 60-61, of -"International Broadcast Engineer", 3/81;(see reasoning and level of skill at '81 as discussed in rejection below);

-CATV Program Origination and Production, by Schiller et al, '79 (see 892); (this reference merely sets forth, *inter alia,* in one place and in laymen terms,

what the level of skill in the art rejection above does in technical terms; so to the extent the above/below rejection is too technical with respect to level of skill in the art at '79, the level is described herein in laymen terms for purpose of clarity);

-Television Production Handbook, by Zettl, Second Edition, '69; (see reasoning and level of skill at '81 as discussed in rejection below);

-Vikene, WO 80/02093; (Vikene suggests, *inter alia,* a method of transmitting from a broadcaster in addition to the information signal remote control signals, in order to on the receiving side, corresponding to announced programs from the broadcaster which are provided with coded markings, to effect recording of the information on a tape or video recorder. Which markings are also recorded and the recorder is programmable in accordance with the announced programs, so as to be reproduced at a desired time using the recorded markings and the program set in the recorder to sort out the desired information and standard stop the recorder; hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Vikene disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained in the recording of the information on a tape or video recorder);

-Greenberg U.S. patent 4,547,804;(see rejections above considering the benefit of greater network operator control);

-Jeffers et al U.S. patent 4,739,510;(see rejections above considering the benefit of the ability to, *inter alia*, decrypt and hence secure programming);

-"Electronic Image and Tone Return Equipment With Switching System and Remote Control Receiver for Television Decoder" by Werner Diederich DT 23 56 969 A1; (Diederich suggests, *inter alia,* an electronic image and tone return equipment with switching system and remote control receiver for television decoder. hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Diederich disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-Campbell et al WO81/02961; to the extent that the above and below do not address this group of claims and to the extent that Campbell et al do (see above), it would have been obvious for the benefits described above including, *inter alia*, enhanced subscriber station services);

-Campbell et al Aban. Parent Appl. No. 135,987; (same as WO81/02961);

-Campbell et al U.S. patent 4,536,791('791); (same as WO81/02961);

-"Automatic Storage and Retrieval of Videotaped Programs", by Kazama et al, 4/79;(Kazama et al suggests, *inter alia,* a fully automatic storage receive of Videotaped Programs that is computer controlled, so as to constitute tape-traffic and handling system. hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Kazama et al disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-"Code accompanying TV program turns on video cassette recorder in proposed scheme", by J Gosch, vol 54 no. 3, February 10, 1981; (Gosch teach, *inter alia,* code accompanying TV programming for turning on a video cassette recorder for delayed or altered schedule programming; as well as for unscheduled broadcasts and for alerting emergencies and providing updates. Hence, to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Gosch disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-"An Automated Programming Control System For Cable TV", by Stern (80); (Stern suggests, *inter alia*, an automated programming control system for Cable TV having a machine control interface unit containing special circuits

for sensing control track pulses, so the system can accurately search for different program material and commercials recorded on one tape; also there is suggested pre-roll of a tape to a specific program; and rewind to a previous segment...so as to "essentially" be "random-access" to the contents of the video tape, under full system control. Hence to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Stern disclosure, it would have been obvious to one having ordinary skill in the art for the convenience);

-"Television Line 21 Encoded Information and It's Impact on Receiver Design", Breeze, Nov. '72; (see rejection above. Hence, to the extent that the above and below discussions do not suggest the particular determined group members of the group of claims, and to the extent that it is met by Breeze (see above) it would have been obvious for the convenience gained);

-"Automatic Switching in the CBC - An Update" by M.W.S. Barlow (Sept. 76); (suggests, *inter alia*, ***network controlled*** automatic switching process. Hence, to the extent that the above and below discussions do not suggest the particular determined group members of the group of claims, and to the extent that it is met by the Barlow disclosure, it would have been obvious for the convenience gained);

-"Transmission no Alphanumeric Data by Television", by Millar et al 1 370 535, GB-1974-10; (see discussion and reasoning below);

-Galumbeck et al (U.S. patent no. 4,725,886); (to the extent that the above and below discussion does not suggest the particular determined group members of the group of claims, and to the extent that the difference is met by Galumbeck et al, it would have been obvious for the convenience gained);

-CBS/CCETT North American Broadcast Teletext Specification, 5/81; (suggests, *inter alia*, captioning transmitted to a decoder for superimposing over the program video at a pre-designated time, and selecting a classification of captions so as to be displayed over program video. Hence, to the extent that the above and below do not suggest the particular group of claims and to the extent it is met by the CBS/CCETT disclosure, it would have been obvious for the convenience gained);

-Zaboklicki (DE 2,904,891); (to the extent that the discussion above and bellow does not suggest the particular determined group members of the group of claims, and to the extent it is met bo Zabolicki, it would have been obvious for the benefit of the convenience gained);

-Nagel (U.S. patent no. 4,064,490); (suggests, *inter alia*, methods and apparatus for the reception, and processing of computer applications. Hence to the extent the above and below discussions do not address the particular

determined group members of the group of claims, and to the extent the difference is met with the above Zaboklicki disclosure, it would have been obvious for the benefit of the convenience gained);

-Kakihara et al (U.S. patent no. 4,251,691);(suggests, *inter alia*, a center-to-end type information service system utilizing the public telephone networks that are fundamental communication media of nation-wide scale in which desired information is requested from the terminal side to the center by means of a telephone set of keyboard and then delivered to and received by a TV receiver, wherein a part of the center functions is transferred together with the exchange function to a subscriber located near the terminal so that the length transmission path connecting the center to terminals becomes shorter and the cost of the whole system can be reduced. Hence, to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Kakihara disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-Hedger et al (Telesoftware-Value Added Teletext); (suggests, *inter alia*, broadcast software and subscriber station computing apparatus having input and output device for interactive user applications. Hence, to the extent the above and below discussions do not address the particular determined group

members of the group of claims, and to the extent the difference is met with the above Kakihara disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-"The Vertical Interval: A General-Purpose Transmission Path", Ted V. Anderson; (See discussion and reasoning below);

"A Public Broadcaster's View of Teletext in the United States", Gunn; (see discussion and reasoning given below);

-"Automatic Program Recording System, Gaucher, '75; (suggests, *inter alia*, an automatic program recording system. Hence, to the extent the above and below discussions do not address the particular determined group members of the group of claims, and to the extent the difference is met with the above Gaucher disclosure, it would have been obvious to one having ordinary skill in the art for the convenience gained);

-U.S. patent 4,290,142, to Schnee et al (to the extent that the above and below discussion does not suggests the particular determined group members of the group of claims, and to the extent that Schnee et al do, it would have been obvious for the benefit of the convenience gained).

See Appendix **A**.

It is apparent that no pending claim is more than an obvious variation of the patented claims when the teachings discussed throughout this action are considered.

Examiner submits Appendix **A** for illustrative purposes. *Assuming arguendo*, that applicants patents, alone, do not cover the pending claims, they are clearly not independent and distinct when the body of prior art described in this action, *inter alia*, is considered. Here, the differences, to the extent they are supported by '81 or are at least obvious over what '81, ***in fact***, supports, i.e. what applicants, in fact, possessed as well as the affiliated cable head end control they are, for the benefits described above, suggested by the prior art (note: Appendix **A** is merely illustrative of the overall problem).

Specification

24. It is recognized that applicants have been filing amendments to the co-pending instant disclosure page's 37, even though it is now more than 18 years after the priority benefit claimed under Section 120. Applicants have identified the '87 disclosed page 14 line 32 through page 15 line 6 as their sole basis of support for this ***very late*** modification. However, the sole ***basis*** offered, is rejected. The added material which was not necessarily fully supported by at least one of the intersection of the '87 and '81 disclosures, and the original '87 disclosure is the:

substitution of --units-- for "words" ('87, page 37, line 24); and

substitution of --words-- for "units" ('87, page 37 line 25).

Oath/Declaration

25. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

> It does not state that the person making the oath or declaration in a continuation-in-part application filed under the conditions specified in 35 U.S.C. 120 which discloses and claims subject matter in addition to that disclosed in the prior copending application, acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

Examiner makes the finding of fact for written description, that applicants have filed yet another continuation-in-part when they filed the instant disclosure under 35 U.S.C. 120, and as a consequence they need to file a new oath or declaration. The circumstance may be unintended or may be intended, *but it is a fact*, and is nevertheless, understood to be the law. For ex,

See In re Lund, 376 F.2d 982, 153 U.S.P.Q. 624 (C.C.P.A. 1967), In Lund, the C.C.P.A. stated:

> As the expression itself implies, the purpose of "incorporation by reference" is to make one document become a part of another document by referring to the former in the latter in such a manner that it is apparent that **the cited document is part of the referencing document as if it were fully set out therein**... (emphasis added).

Lund, 376 F.2d at 1370-71.

It is understood that judge made ***law*** holds that when applicants supplemented their disclosure on the date of filing their instant continuation under Section 120 by ***inserting into page 1*** of the instant continuation one of the other co-pending applications of the same chain of co-pending applications and specifically 'incorporating-by-reference' co-pending application 08/113,329('329), "in it's entirety" into the instant disclosure, applicants have **in fact *conveyed*** the instant disclosure as including the entire content of co-pending application 08/113,329. This incorporation "in it[']s entirety" would necessarily include, *inter alia*, each piece of prior art cited therein.

It appears there is corroboration in the record that it was applicants' intent to accomplish inserting paper no 21, of '329, into instant page 1 through the use of incorporation-by-reference "in it[']s entirety". Since such an incorporation-by-reference "in it[']s entirely" serves to bring paper no. 21, then such an incorporation-by-reference necessarily brings in ***all*** of the contents of the identified application through the use of the term "in it[']s entirety".

For example, it is recognized that even though applicants' representative's intention, ***under Section 120***, may have merely been to include at least the paper no. 21 of that document, he, ***under Section 120 in fact***, chose to insert the "entirety" of the '329 contents into page 1. That is, even though applicants' representative could

have included paper 21 into a PTO Form 1449, or merely 'incorporated it by reference' ***into an response***, he did not.

Conclusion

With regard to future interviews, **M.P.E.P. 713.03 is hereby called to applicants attention.**

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *William Luther* whose telephone number is *(703) 308-6609*. The examiner can normally be reached on Monday through Friday from 9:30 am to 3:00 pm.

27. If attempts to reach the examiner by telephone are unsuccessful, supervisor Andrew Faile can be reached at *(703) 305-4380.*

28. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is *(703) 305-3900.*

William Luther
Primary Examiner
March 24, 2000

APPENDIX A

PENDING	PATENT	FINDING
3. A method of processing signals to control a presentation, said method comprising the steps of: receiving a television signal containing television programming and communicating said television signal to a storage device; receiving a first instruct signal which is effective to instruct a computer at a user station to supplement or complete said television programming at an output device; selecting one of: (1) a time at which to communicate said first instruct signal; and (2) a location to which to communicate said first instruct signal; communicating said first instruct signal at said selected time or to said selected location; and storing said television signal and said instruct signal at said storage device.	'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-to-overlay signal to said receiver stations at a time when the corresponding overlay is not being	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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	displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-to-overlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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8. A method of generating and encoding signals to control a presentation comprising the steps of: receiving and storing a program that contains video information; receiving an instruction, said instruction having effect to instruct a user station processor to generate or output information to supplement or complete said program; encoding said instruction, said step of encoding translating said instruction to a first control signal with said effect; and storing said first control signal in conjunction with said program.	'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-to-overlay signal to said receiver stations at a time when the corresponding overlay is not being	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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	displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-to-overlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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13. A method of processing signals in a system of stations including at least one transmitter station and at least one receiver station to control a mass medium programming presentation comprising the steps of: receiving a signal containing a data file or unit of mass medium programming and communicating said signal to a storage device; receiving one or more instruct signals which are effective at a broadcast or cablecast transmitter station to communicate said signal to a transmitter and at a receiver station to store said signal or present information contained in said signal at an output device; communicating said one or more instruct signals to said storage device; and storing said one or more instruct signals at said storage device in association with said data file or unit of mass medium programming.	'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-to-overlay signal to said receiver stations at a time when the corresponding overlay is not being	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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	displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-to-overlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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18. An apparatus for providing a mass medium programming presentation comprising: an output device for outputting a mass medium programming presentation to a user; a storage device operatively connected to said output device for storing and communicating mass medium program materials and one or more embedded instruct signals effective at the apparatus to supplement or complete said mass medium program materials based on stored data; a detector operatively connected to said storage device for detecting said one or more embedded instruct signals; and a processor operatively connected to said storage device, said output device, and said detector for processing data and controlling said storage device and said output device to output said mass medium program materials and the supplemental or completion information in accordance with said embedded instruct signals.	'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-to-overlay signal to said receiver stations at a time when the corresponding overlay is not being	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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	displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-to-overlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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19. A transmitter station apparatus comprising: a transmitter for transmitting a mass medium programming signal; a storage device operatively connected to said transmitter for storing and outputting mass medium program materials and one or more instruct signals effective at a receiver station apparatus to supplement or complete said mass medium program materials based on stored data; a detector operatively connected to said storage device for detecting said one or more instruct signals; and a computer operatively connected to said storage device and said signal detector for controlling communication of said one or more instruct signals from said storage device to said transmitter.	'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-to-overlay signal to said receiver stations at a time when the corresponding overlay is not being	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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	displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-to-overlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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33. A method of processing signals to control at least one of a television and a media presentation comprising the steps of: receiving a television signal containing first television programming and communicating said television signal and said first television programming to a storage device, said first television programming including audio; receiving processor instructions which are capable of instructing a computer to present, with said first television programming at at least one output device, information to at least one of complete and supplement said first television programming; selecting at least one of: (1) at least one first time at which to communicate said processor instructions; and (2) at least one first location to which to communicate said processor instructions; communicating said processor instructions to said storage device based on said step of selecting; and storing said television signal, said first television programming, and said processor instructions at said storage device concurrently.	'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-to-overlay signal to said receiver stations at a time when the corresponding overlay is not being	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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	displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-to-overlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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38. A method of embedding processor instructions to control a presentation comprising the steps of: receiving a program that contains video information, said video information including at least three full screen video images to be outputted at a subscriber station in a predetermined sequence; receiving said processor instructions and at least one control instruction, said processor instructions capable of instructing a subscriber station apparatus to at least one of process and output subscriber specific information pertaining to said program, said at least one control instruction capable of causing said subscriber station apparatus to operate under control of said processor instructions; commencing communication of said program to a storage device; embedding said processor instructions and said at least one control instruction in a signal containing said program while said signal and said program are being communicated; and storing said signal containing said program, said embedded	'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-to-overlay signal to said receiver stations at a time when the corresponding overlay is not being	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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processor instructions, and said embedded at least one control instruction in said storage device.	displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-to-overlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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43. A method of processing signals to control a mass medium programming presentation comprising the steps of: receiving a signal containing at least one of data and mass medium programming to be outputted in said mass medium programming presentation and communicating said signal to a storage device; receiving processor instructions which are capable of controlling a receiver station to present information contained in said signal at an output device and to process a subscriber reaction to information contained in said signal; communicating said processor instructions to said storage device; receiving at least one first instruction signal which is effective at one of a broadcast and a cablecast transmitter station to communicate said signal and said processor instructions to a transmitter; communicating said at least one first instruction signal to said storage device; and storing said at least one first instruction signal and said processor instructions at said storage device in association	'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-to-overlay signal to said receiver stations at a time when the corresponding overlay is not being	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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with said at least one of said data and said mass medium programming.	displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-to-overlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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48. A transmitter station apparatus comprising: a transmitter for transmitting a mass medium programming signal comprising mass medium program materials, downloadable code, and at least one instruction signal; a storage device operatively connected to said transmitter for storing and outputting said mass medium program materials, said downloadable code, and said at least one instruction signal; a control signal detector operatively connected to said storage device for detecting said at least one instruction signal; and a computer operatively connected to said storage device and said control signal detector for controlling communication of one of said mass medium program materials and said downloadable code on the basis of said at least one instruction signal.	'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-to-overlay signal to said receiver stations at a time when the corresponding overlay is not being	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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	displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-to-overlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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96. A method of processing signals to control a multimedia presentation comprising the steps of: receiving a television signal containing television programming and communicating said television signal and said television programming to at least one storage device, said television programming consisting of audio and a plurality of video images to be displayed in at least one predetermined sequence, said at least one predetermined sequence including full motion video; receiving at least one first instruction signal which is capable of instructing a computer to conduct a procedure of at least one of inputting and responding to a viewer reaction to said television programming; selecting at least one of: (1) at least one time at which to communicate said first instruction signal; and (2) at least one first location to which to communicate said first instruction signal; communicating said at least one first instruction signal (i) at said at least one selected time and (ii) to said selected	'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-to-overlay signal to said receiver stations at a time when the corresponding overlay is not being	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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at least one first location, based on said step of selecting; and storing said television signal, said television programming, and said at least one first instruction signal at said at least one storage device concurrently.	displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-to-overlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

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101. A method of encoding signals to control a presentation comprising the steps of: receiving and storing a program that contains video information, said video information including at least three full-screen video images to be outputted at a subscriber station in a predetermined sequence; receiving at least one first instruction which is capable of instructing at least one processor at said subscriber station to at least one of input and respond to a viewer reaction to said program; encoding said at least one first instruction, said step of encoding translating said at least one first instruction to a control signal, said control signal for directing said at least one processor at said subscriber station; and storing said control signal from said step of encoding in conjunction with said program.	'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-to-overlay signal to said receiver stations at a time when the corresponding overlay is not being	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

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	displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-to-overlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

APPENDIX A

PENDING	PATENT	FINDING
106. A method of processing signals to control a mass medium programming presentation comprising the steps of: receiving a signal containing one of a data file and mass medium programming and communicating said signal to a storage device; receiving at least one first instruction signal which is capable of controlling a subscriber station to one of input and respond to a viewer reaction to information contained in said signal and to communicate at least a portion of said signal to a transmitter; communicating said at least one first instruction signal to said storage device; and storing said at least one first instruction signal at said storage device in association with said one of said data file and said mass medium programming.	'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-to-overlay signal to said receiver stations at a time when the corresponding overlay is not being	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

APPENDIX A

PENDING	PATENT	FINDING
	displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-to-overlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277.

APPENDIX A

PENDING	PATENT	FINDING
111. A mass medium programming output apparatus comprising: an input device for inputting a user reaction to a mass medium programming presentation; at least one storage device operatively connected to said input device for storing a signal containing (i) mass medium program materials and (ii) at least one embedded instruction signal for a variable time period and outputting said signal; a control signal detector operatively connected to said storage device for detecting said at least one embedded instruction signal; and a processor operatively connected to said input device, said at least one storage device, and said control signal detector for processing said input user reaction in response to said at least one embedded instruction signal and for controlling said at least one storage device to output.	'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-to-overlay signal to said receiver stations at a time when the corresponding overlay is not being	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

APPENDIX A

PENDING	PATENT	FINDING
	displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-to-overlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277

APPENDIX A

PENDING	PATENT	FINDING
112. A transmitter station apparatus comprising: an input device for inputting a user reaction to mass medium programming; a transmitter for transmitting information to a remote station; at least one storage device operatively connected to said transmitter for storing data and at least one instruction signal for a variable time period and communicating said data and said at least instruction signal; a control signal detector operatively connected to said at least said storage device for detecting said at least one instruction signal; and a processor operatively connected to said input device, said control signal detector, and said at least said storage device for processing said user reaction in response to said at least one instruction signal and for controlling said at least one storage device to communicate at least one of said data to said transmitter.	'490 1. A method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of: transmitting a video signal containing a television program signal to said receivers, transmitting an instruct-to-overlay signal to said receiver stations at a time when the corresponding overlay is not being	For ex, -'490; -'490 + '725; -'490 + '825; -'490 + '414; -'490 + '654; -'490 + 277; -'725; -'725 + '825; -'825 + '414; -'825 + '654; -'825 + '277; etc. -'490 + Campbell et al; -'490 + Jeffers et al; -'490 + Hazelwood et al; -'490 +Galumbeck ('419) or ('886); -'490 + Gosch; -'490 + Stern; '490 + Gunn; -'490 + Greenberg ('804); -'490 + Tunmann and J.F. Roche; -'490 + Vikene WO 8002093; -'490 + Barlow; -'490 + Zettl; -'490 + GB 1974 -10 (Millar); -490 + CBS/CCETT North American Broadcast Teletext Specification; same as above but substitute '725; but,

APPENDIX A

PENDING	PATENT	FINDING
	displayed, receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations, detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-to-overlay signal to the computers associated with the video receivers of said selected stations, and causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.	also the 7th patent. -'490 +Yamane et al; -'490 + Hetrich; same as above, but substitute '725, '825; Likewise, '414, 654, '277

APPENDIX B

MARCH 25, 2000

	ALLEGED "GROUP"	ACTIVE	INACTIVE	CONSOLIDATION STATUS OF ACTIVE CASE
1	ADVT	n/a	n/a	n/a
2	ASCO	n/a	n/a	n/a
3	ASRE	441,701	441,027	CONSOLIDATED
4	BCON	473,484	440,837	CONSOLIDATED
5	BUDG	n/a	n/a	n/a
6	CHAN	n/a	n/a	n/a
7	CLER	n/a	n/a	n/a
8	COMB	466,894	469,078	CONSOLIDATED
9	DATA	397,636	441,996	CONSOLIDATED
10	DECR	449,263	449,431	CONSOLIDATED
11	DIGI	435,757	478,794	CONSOLIDATED
12	DOWN	470,051	469,106	NONE TO DATE
13	EMBD	n/a	n/a	n/a
14	ERRO	n/a	n/a	n/a
15	FANA	n/a	n/a	n/a
16	FCOM	474,139	441,880	NONE TO DATE
17	FNAV	437,864	444,756	NONE TO DATE
18	FNET	488,439	487,893	CONSOLIDATED
19	HEAD	442,335	442,165	NONE TO DATE
20	HOST	437,791	438,206	CONSOLIDATED
21	I2CM	446,431	437,045	CONSOLIDATED
22	I2CR	486,258	447,621	CONSOLIDATED
23	I2GE	511,491	438,659	NONE TO DATE
24	I2GR	437,635	441,577	NONE TO DATE
25	I2RE	487,851	483,174	CONSOLIDATED
26	IMAG	n/a	n/a	n/a
27	INTE	470,571	471,024	CONSOLIDATED
28	METE	452,395	483,980	CONSOLIDATED
29	MICR	n/a	n/a	n/a
30	MKTR	474,964	480,058	CONSOLIDATED
31	MSG	n/a	n/a	n/a
32	MSTA	438,216	483,269	NONE TO DATE
33	MULT	487,526	437,044	CONSOLIDATED
34	NAUT	477,805	437,937	CONSOLIDATED
35	NAVI	459,216	480,383	CONSOLIDATED
36	NCOM	n/a	n/a	n/a
37	NECA	475,342	445,290	CONSOLIDATED
38	NGEN	n/a	n/a	n/a
39	OPNS	442,383	488,620	NONE TO DATE
40	PARA	488,378	477,564	NONE TO DATE
41	POLI	n/a	n/a	n/a
42	PROB	n/a	n/a	n/a
43	RCOM	449,281	449,800	CONSOLIDATED
44	RECO	n/a	n/a	n/a
45	REST	498,022	442,335	NONE TO DATE
46	SCHE	n/a	n/a	n/a
47	SETT	449,523	487,649	CONSOLIDATED
48	SKIP	n/a	n/a	n/a
49	STUD	474,146	483,054	CONSOLIDATED
50	SWIT	469,612	442,507	NONE TO DATE
51	SYNC	449,532	449,110	CONSOLIDATED
52	TELE	n/a	n/a	n/a
53	TIME	446,494	446,429	NONE TO DATE
54	TRAN	487,536	482,573	CONSOLIDATED
55	VERI	448,326	447,711	NONE TO DATE
56	VIEW	485,283	470,476	CONSOLIDATED